

SOUTHERN TEXTILE BULLETIN

VOL. IV

CHARLOTTE, N. C., DECEMBER 5, 1912

NUMBER 14

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CHARLOTTE, N. C.

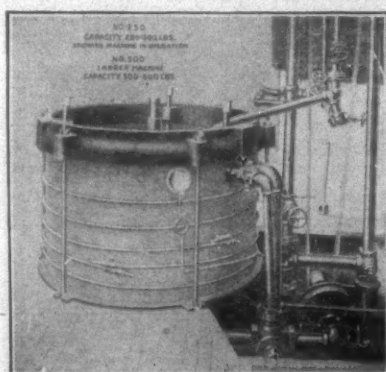
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SOUTHERN TEXTILE BULLETIN

VOL. 4

CHARLOTTE, N. C., DECEMBER 5, 1912

NUMBER 14

Waste, Efficiency and System in the Weave Room

J. H. Bagwell before Southern Textile Association

Mr. President, Members and Guests of the Southern Textile Association:

Weaving and the weave room have been covered so thoroughly recently by some very able writers, that there is practically nothing left for me to say. Therefore, I have prepared this paper in a general way on questions of subjects that deal directly or indirectly with the weave room, and I shall call it "Waste, System and Efficiency." These are three questions that should be of vital interest to every manufacturer, and they are treated too lightly in the average cotton mill; or, in other words, they are the three things that receive the least attention. They are three of the most important things to be considered in the successful operation of a mill.

It has always been a puzzle to me why mill managers are ever ready to install labor saving and cost reducing machinery and still go on with the same old system of waste and inefficiency in the mill, and letting the machine ruin for the lack of system and care. They are wise on the purchase but they are foolish on the care. Many times good machinery is condemned not because of any fault of the machine, but on account of personal prejudice and the lack of efficiency on the part of the superintendent or overseer in charge of the mill. Again, many times machinery is passed as O. K. by an inefficient superintendent or overseer for personal gain, and good men are condemned in after years for not producing what the machine is not capable of producing; and the waste through the loss of production and poor quality of the product, not counting an unreasonable cost for repairs and up-keep, runs up into the thousands of dollars.

Another cause of loss which is inestimable is the constant changing of operatives and overseers. Now it is not the writer's intention of criticising any company or individual, but from my experience and observation I must say that the majority of waste in and around the average cotton mill is due to lack of system and efficiency—system on the part of the management, and efficiency of either the machine, the operative, the overseer, or the superintendent, and oftentimes of all. If the management of the average cotton mill would give more time and attention to the right kind of system in their mills, and the efficiency of the operatives and the men in charge of the mill, the savings would run into the thousands of dollars each year, above the cost, and would increase their production from 10 to 25 per cent with practically no increase in the manufacturing cost. I say this because I know what the waste from inefficiency and bad management of all sorts is. I have seen it in so many forms, and in most cases it is due to the lack of system and efficiency on the part of the overseer and superintendent in charge of the mill. Often this lack of system and efficiency has its origin in the office—the management as a whole may be just as inefficient as any part of the mill, and the superintendent and especially the overseer may be powerless to eliminate this waste to a certain extent, nevertheless if they are efficient and competent men they can by constant and vigilant effort greatly reduce it and by and by demonstrate so plainly to the man higher up that he cannot help but see it.

I feel safe in saying that the actual waste made in the average cotton mill of the South today, from the lack of system and efficiency is greater than the waste made in any other manufacturing industry of the country; and that this has been the indirect cause of the failure of so many well equipped and once financially strong mills.

The writer had the pleasure recently of visiting some of the largest manufacturing and business plants of the country and made special inquiries regarding their system of management and waste; and it puts me to wondering—why the cotton mills of the South were so slow in recognizing the value of system and efficiency in their mills. One plant I visited does from ninety to one hundred million dollars of business annually, and they do not waste a scrap of paper or a piece of cloth one inch square. Another place I visited was a great packing plant. There I was told the only thing they let go to waste was the "squeal."

Now, why don't the cotton mills of the South wake up and eliminate all their unnecessary waste except the squeal? The answer is they lack the initiative, they wait for some one else and some of them must be shown so plainly a child could see it, before they believe it possible. The secret of many mills being short of help is that they lack system or the right kind of system, and when I say system I must say efficiency—for where you find system you will find efficiency and where you find surplus waste you find the lack of system and efficiency.

Most mills have elaborate and efficient system in the office for cost keeping, cost finding, etc. They can tell you in an instant what their goods are costing them, what their supply cost is and the amount of waste that is reported (and there are thousands of dollars worth that are not reported), but ask them why their cost is what it is, and why their supply cost is so high, and why their waste and seconds are greater than they should be, and see what the reply will be.

Why not install system of the right kind and efficiency in the mill as well as the office? Some mills have the finest system in their mills, installed by practical men who know the business, and who know that no system will work itself without the co-operation of every individual that makes up the room force; men who know that the system must be easily and plainly understood by every one in the mill. Others have so-called system in their mills, gotten up by men who slid in at the top, instead of men who came up from the bottom. These systems are usually largely "bunk." They are top heavy; they do not square; they are elaborate and complicated—form-structures instead of plain practical plans, founded on plain common sense suited to the comprehension of the average mill operative, who wants to know and must understand them. He is the man on the job, and anything that shoots over his head is a dead letter.

A man does not need to go inside a mill to size up the efficiency of the plant and the men in charge. A trip through the waste house and around the scrap pile will tell the tale. A man who is careful about his waste is sure to be careful about the efficiency of the plant and the quantity of his production. When I speak about an efficient overseer or superintendent, I mean a man who thoroughly understands all the details of the business he is in, and has the courage to put his ideas into effect, and if he is the man for the place he will soon have every one under him fit for their places. An efficient superintendent or overseer in a cotton mill should be considered an expert and for his services, like experts in other trades, he should be equally well paid.

Now, some one may ask what are the makings of a real efficient superintendent or overseer? What is the standard by which the modern efficient overseer or superintendent can be judged? A vital and illuminating answer to this question and a mighty important one to every manufacturer, would be the actual life story of some of the overseers and superintendents here today. Because a man has been apparently successful at one mill for a few years or any number of years, is not sufficient evidence that he is efficient. In some mills where the superintendent and overseers have been there the longest we find the wasteful conditions the worst.

Having good machinery and efficient overseers is not all that is required to make a mill a success. The management and superintendent as well as overseers must strive to make working and living conditions such as they themselves would be willing to live or work under. They should not consider their obligation filled simply by passing out the wages earned every week or two. It takes more than good wages to hold help and the sooner some mills realize this the better off they will be. One mill does not need to pay better wages than another to keep plenty of good help, but it must make working and living conditions better than the other fellow's.

I recently saw an "ad." in a textile paper for weavers, saying—"Good

(Continued on next page.)

President's Address

Gentlemen of the Southern Textile Association:

I greet you most cordially upon this, the eleventh semi-annual meeting of the Southern Textile Association. I congratulate the association for having selected Chattanooga for this, their first meeting in Tennessee, which has enabled us to meet amid such pleasant and comfortable surroundings. The mountains of Tennessee are her chief glory; famous among these is the Lookout, keeping guard through all the drifting centuries, over the beautiful valleys and the surrounding hills, through which winds and interwinds the grand old Tennessee River. Lookout Mountain is one of the "beauty spots" in a land of beauty. In addition to this it furnishes the most thrilling page in all the history of Tennessee, bearing as it does the marks of many wars and of two distinct races. First, the habitation of the Indians, from whom the great river washing its base received the name that afterward became the name of the State, Tennessee.

Visitors from all over the world have visited Lookout and are unanimous in pronouncing the views unsurpassed by any in Europe.

Our coming together under such favorable circumstances will make this both in its social and business features one of the most pleasant and profitable meetings in the history of the organization. The formation of this association is but a verification of the maxim that "In unity there is strength." By meeting together and discussing the various matters that are so vital to the superintendent and overseers, and are alike of interest to the manufacturers themselves, we get the benefit of the best thought and experience. The successful continuance of the association is worthy of our best consideration and sincere efforts. Every member should give it his enthusiastic support to make its activities more progressive and valuable, not only to the members of this association, but alike to all concerned. The association has grown from a few in number to a strong organization, having now about 850 members composed of the leading superintendents and overseers of the South, making it a most congenial organization.

The South is taking a prominent position in the utilization of cotton. The last government report shows the South consumed more cotton during the past year than all other States combined have in any other one year, having consumed 2,712,622 bales, a remarkable growth in consumption for this section, which last year consumed 2,328,487, an increase in consumption in one year of 384,135 bales. All other mills consumed 2,655,049 bales in 1912, as against 2,376,491 bales in 1911, an increase of only 278,558 in the one year. The South's increase from 1911 to 1912 amounted to 69,577 bales over the increase of all other mills. The total supply of cotton for 1912 amounted to 17,675,294 bales, the highest record which has been recorded in cotton supply, exceeding last year's supply by 3,699,871 bales.

The South has today 837 cotton mills and 12,318,356 spindles, about 50 per cent more spindles than we had in 1900. These mills employ 5,022 superintendents, overseers and master mechanics. There are 1,000,000 spindles under construction in the South today.

As I see it, the textile industry is still in its infancy in the South, and as it continues to grow there will be a greater demand for efficient overseers

and superintendents, and it behooves us to take advantage of every opportunity of the present day, and we should take a special pride and consider the privilege and opportunity of preparing the boys and young men now in our employ for the future usefulness, for the "Boy of today is the man of tomorrow." My experience has been that sometimes, at least, the most unpromising boy grows into the most useful man. Garfield said that he never met a ragged, barefoot boy but that he felt like taking off his hat to that boy, for in him there is a possible future Governor or President. He had reason to feel so, for I have no doubt that the very men who used to kick and curse Garfield, the canal boat boy, afterward shouted "hurrahs" for Garfield, the President. I honor the boy not for what he is, but for what one day, please God, he is going to be.

Following this line of thought still further, I desire to say that a study of the relationship existing between all departments of the mill will furnish a vast field of research for the thinking mind. That mill whose managers realize that there is a thread of interdependence running through every department of the mill, and touching every individual in each department, is a success; for when this fact is kept in view, success is inevitable.

The superintendent or overseer who leads his help to know that he has no favorites, but that merit is appreciated from whatever source it comes, is sure to succeed. Let those working for you realize that honest endeavor and rigid application will be amply rewarded, and the help proposition will be solved, for there is a mutual instinct in the heart of every individual that causes a desire to be appreciated.

The value of an employe is measured by the same rule that regulates the success of a man who is in business for himself. Promotions come just as increased business and larger profits do, to those who become masters of what they have and make it a power for controlling whatever is within reach.

Promotions are made from among those who do their own work well, and also display ability beyond the requirements of the particular positions which they hold, not from among those who slight their work and strive for the jobs they haven't got.

If you are to be dissatisfied, let it be with the quality of services you are rendering, and then study how to improve it, for the more exacting you are with yourself and the broader your knowledge of what you are meant to accomplish, the greater will be your ability to increase your worth, upon which will depend your advancement.

Minor positions are easily filled, but difficulties increase in proportion to the importance of the office.

I congratulate the Southern mills upon the splendid progress that has been made during recent years along educational lines and welfare work. The health and morals of the operatives have been of especial consideration. Schools and churches have been established, sanitary conditions of mills and tenement homes have been improved and made more comfortable and attractive; hence it is the exception where we do not find the most kindly and friendly feelings existing between the employer and employe, the one striving to aid, encourage and benefit the other, and these efforts have been appreciated.

WASTE, SYSTEM AND EFFICIENCY IN THE WEAVE ROOM.

(Continued from Page 3)

weavers could make \$2.75 per day." Just think, \$2.75 for a weaver on print goods!

Why should a mill with a job like that have to advertise for help? The answer is plain. The working and living conditions are such that good help will not stay there at any price. To the writer's personal knowledge this same mill has had seven overseers in its weave room in the past year, and is open for another at the present time.

Now, why the changes? Surely there must have been one good man among them all. The answer is the same; working conditions are such that a good man will not, and a poor man cannot stay. Considering each change of overseers has cost this mill \$300, which is reasonable, this would be two thousand dollars. Could not this have been spent to a better advantage to the mill and every one concerned? And would it not be better to pay less wages and improve working and living conditions? Would not that be a good investment and money well spent? We find many just such mills and conditions as these and the management can't understand why they are always short of help. They will spend thousands of dollars a year trying to get help, yet they do not spend a penny trying to improve living or working conditions in their mill or village in order to hold them. Usually the blame for all this falls on the weave room and weaver. The management seems to be blind to everything but weave room "production," quality not even being considered.

Supposing that the working and living conditions are what they should be or fairly good, how are we to install system and efficiency in the weave room? First, it is absolutely necessary for the management, from the president down to the superintendent, to back up the installation to a finish, regardless of who the re-organization hits. Many managers and superintendents realize the lack of system in their weave rooms and agree that it would bring wonderful results, and they decide to get a man who is efficient and competent; but when the weeding out process starts, which must be done in most all cases, and it possibly hits one of a favored few who have held their places more through sentiment than ability, or possibly the new man's idea

of management is different from theirs, they are loth to back him up and want to dictate to him as to how he must do this or that; or in other words, their attitude is—we have always done it this way and this is the way we will continue to have it done.

Having intelligently secured the man they needed, they should have such confidence in his integrity and ability as to give him a free hand and not require him to consult them about changes that he alone understands better than any interpretation by them could possibly inform him. They should be open for suggestions from him, as their defective ways or plans may bear against the success of the weave room and injure his reputation. But we must have a man for overseer who has expert knowledge of the loom, and of human nature; a man who is able to fix the loom to get the results desired or expected of others. He should be able to step up to a loom and give points to the fixer or weaver, that gives evidence of his having superior knowledge of the loom and work.

His words and his manipulation of the loom and the work should carry weight, and draw the fixers and weavers closer to their work with increased confidence that more and better work can be done by themselves. He should have a thorough practical knowledge of what the work is and how it should be done, a gift of speech and courtesy to adapt his instructions to the understanding of his help, and never put help to work without a thorough understanding of what the work is and how it must be done. He should be business-like, fair and square, and his greatest admirers will be his help. His motto should be "Have a system," for the cotton mill is no place for the haphazard man.

What are the conditions we find in the different weave rooms? We find just as many different conditions as we find weave rooms, and they must be handled in just as many different ways, but the keynote to all is to be efficient and have a system; then you will be able to cope with them all. A man in taking charge of a weave room should spend much time for the first few days in the cloth room, getting at first hand the defects in the cloth that would require his first and immediate attention; then proceed in the weave room—not expecting to find a bed of roses, but to discover for himself any

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defects that may exist yet undiscovered by any one; and demonstrating by actual changes and improvements that he is going to better the working conditions. But let it be understood that they are going to be done in a business way and with an eye single to justice to all and special favors to none. This not only gets the help with him, but fosters confidence and disarms distrust. Of course there will be some who swear he is ruining everything and tell him these things cannot be done and never have been done, etc. They may leave but they will come back and when they do they will be his most loyal supporters.

An overseer must train his second hands and section men up to the highest point of efficiency and then stand behind them to the limit of consistency and make every one in the room from second hand down, feel that they will be punished for the violation of any set rule and punished without fear or favor.

I have no sympathy with the idea that is abroad among overseers and superintendents, that you have to be lax and loose with help to hold them. The policy for holding help should not be by philanthropy, but plain business sense. You will get better help and hold the good ones longer. Genuine good feeling should be the condition of employment in the room, and a man that is sore should not be wanted about the place. There are many ways by which the overseer can awaken interest among his help, especially among his loom fixers. One I consider productive of the best and most permanent results is to stay in close friendly, but not familiar touch with them—encourage them to diligently apply themselves to the mastering of every detail of their work, and try to discover any defect that may exist and discuss its remedy. The overseer should have his men feel that if they make a discovery they are going to receive encouragement and credit for it, and if the idea is a good one, he should try to put it into execution. This will inspire and spur his men on to closer application and greater development in usefulness for their employer. No competent and progressive overseer or superintendent who will get close enough to his men to draw from them their best thoughts about their work, should ever need to advertise for help. From the overseer to the sweepers, every man in the mill does some thinking about his job. He can't help it, and his thoughts are likely to be practical and right to the point. Does he voice these ideas unless the man at the top worms them out of him? Not much. He knows better. Why? Because there is a type of superintendents and overseers who belong to the military order, full of craft traditions; and too commonly their heads and not their outlook becomes enlarged by their promotion. Their attitude is—I always did it this way and this is the only way to do it. Not all superintendents and overseers are like this, but too many of them are, and this kind of men cannot draw out the concealed ideas of the men on the job—men who have

by far, more imagination, ideas, and ambition than they are commonly given credit for.

In a large weave room there are difficulties that are continually arising that not only require skill and knowledge to overcome, but strong determination and diplomacy of great proportions to deal with them. The overseer must always be a leader and never a driver. The success of a mill largely depends upon the superintendent and overseers. The success of a weave room not only depends upon the superintendent and overseers, but the cooperation of the overseers. The weave room is the one room every man should work for, and there must be harmony, honesty, and team work among the overseers if you have a successful mill. Yet in face of all this how often we find instead of team work, obstruction tactics among the overseers. The desire to put one over the other fellow is stronger in their minds than for the success of the mill. Often this is done with the full knowledge of the superintendent. A spinner in order to gain his point will resort to ways that are dark knowing full well what it means to the weave room, and the company's welfare.

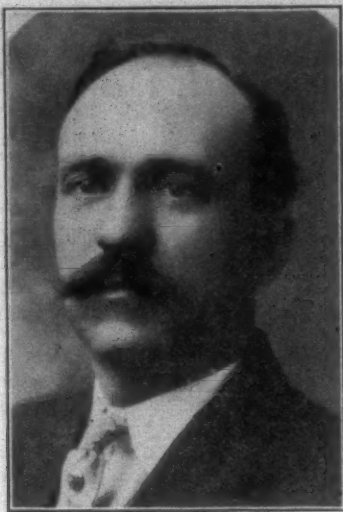
Usually the blame for the result of this kind of work falls on the weaver, and the weave room. There is no room in a cotton mill for this kind of deceit, if the mill is to be a success. Deceit in a cotton mill spells ruin. One overseer must regard the rights of others. The help in a mill reflects the spirit of the overseers and the mill. They are just what the mill causes them to be. It is not necessary for a man to go to a mill to see what it is, as many of you know. They are known by the class of help and overseers they turn out as well as their goods.

I think a superintendent should get his overseers together each day and have them report any troubles that may come up or exist, and if any one of his men has a complaint to make about what he is getting from the other fellow's room, let him make it then and there. If the other fellow has an excuse to make, let him make it, but there should be a poor market for excuses, and the superintendent should have all his men understand that it is not a personal matter, but a matter of business; and that they are to all work for the same end, the success of the entire plant. A superintendent should not tolerate touchiness or friction among his overseers. His motto should be "Get together or get out," and it would only be a little while until it would become a matter of personal honor between the overseers to deliver the work to the other fellows in the best possible condition, and things would move as they never moved before and in a short while he would have system and efficiency in the mill equalled by few and excelled by none.

Among those Present

Following are the members present, besides possibly some few others who failed to report to the secretary:

J. H. Bagwell, Overseer Weaving, Merrimack Mills, Huntsville, Ala.
H. O. Ball, Supt. Pepperton Mill, Jackson, Ga.
H. E. Bates, Supt. Merrimack Mill, Huntsville, Ala.
W. W. Becknell, Carder, Anchor Duck Mill, Rome, Ga.
O. F. Benton, Spinner, Gainesville (Ga.) Cotton Mill.
C. L. Bixby, Engineer, Gainesville (Ga.) Cotton Mill.
John Bothamley, Salesman dye stuffs, Atlanta, Ga.
C. W. Godwin, Salesman, Spartanent, besides possibly some few others who failed to report to the secretary.
C. H. Goodroe, Supt. Yazoo Yarn Mill, Yazoo, Miss.
James A. Greer, Carder and Spinner, Central Mills, Sylacauga, Ala.
C. B. Gunn, Supt. Union Mill, La-Grange, Ga.
Dr. Joseph C. Haas, Rep. E. F. Houghton & Co., Philadelphia.
Chas. J. Haas, Salesman, E. F. Houghton & Co., Philadelphia.
G. W. Hamilton, Jr., Supt. Crown Mill, Dalton, Ga.
W. P. Hamrick, Supt. Olympia Mill, Columbia, S. C.
O. W. Hanson, Asst. Carder, Mandeville Mill, Carrollton, Ga.
D. B. Hatch, Overseer mule spinning, Richmond Spin. Co., East Lake, Tenn.
Frank E. Heymer, Agt., A. C. Cotton Mill, Alexander City, Ala.
J. W. Horner, with W. H. Bigelow, Charlotte and Atlanta, Ga.
C. H. Honier, Asst. Mgr. Fulton Bag



P. A. Smith,
Atlanta, Ga.

H. E. Buck, Salesman, Arnold, Hoffman & Co., Greensboro, N. C.
Stephen Burgoyne, Treas. Dunn Flyer Co., Boston, Mass.
M. Burke, representing Bradford Belting Co., Cincinnati, Ohio.
A. B. Carter, Sou. Rep. Victor Shaw Ring Trav. Co., Athens, Ga.
W. D. Cooksey, Salesman, National Ring Trav. Co., Gaffney, S. C.
B. C. Crawford, Weaver, Floyd Mill, Rome, Ga.
J. S. Cromer, Rep. Andrews Reed & Harness Works, Spartanburg, S. C.
G. E. Crowley, Salesman, Keever Bros. Co., Atlanta, Ga.
J. F. Cunningham, Rep. Sou. Spindle & Flyer Co., Atlanta, Ga.
J. P. Dillard, Weaver, Mandeville Mill, Carrollton, Ga.
D. C. Dunn, Salesman, Stafford Loom Works, Bessemer City, N. C.
Mike Elliott, Carder, Gainesville (Ga.) Cotton Mill.
W. R. Ennis, Trav. Rep., Sou. Textile Bulletin, Charlotte, N. C.
W. H. Epps, Supt. Prattville, Ala.
G. S. Escott, Pres. Mill News Ptg. Co., Charlotte, N. C.
E. A. Fairbanks, Sou. Mgr. Prov Drysalters Co., Charlotte, N. C.
L. H. Fears, Weaver, Dallas Mill, Huntsville, Ala.
Jas. B. Fitch, Treas. Felton Brush Co., Atlanta, Ga.
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(Continued on Page 20)

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System and Cost in the Repair Shop

Richard Thirsk before Southern Textile Association

Manufacturing method in the mill repair shop is, I believe, something of a novelty in this section. That it is a satisfactory arrangement if correctly carried out is my belief, and most repair shops of fair size will find it a profitable investment. Of course it calls for a somewhat larger investment in tools than is usually found in repair shops, but that is a minor consideration against the benefits to be derived. There are many jobs that come to the repair shop that must be handled in the usual repair shop style. There are also many jobs that may be profitably handled under manufacturing methods that will show a large margin of profit over the old methods.

As a rule all repair parts, especially for looms may be made up in sufficient quantities to justify the expense of making jigs, thus insuring interchangeability and low cost of manufacture. Take for example a job handled a short time ago. An order came into the shop for 90 draft gears of 40 teeth, 24 pitch. These gears were 2 1-2 outside diameter, 7/8-inch face, 21-23 taper hole.

The blanks were chucked in universal chuck in 16-in turret lathe. The first operation was to drill 21-32 hole; the next to face off one side, which was done with tool in cross slide; third, the hole was reamed with taper reamer, a collar on reamer determining the diameter of hole; the blanks were next key-seated, a 5-32 hole being drilled blank and drifted out with square tool. A hardened steel plug with key was used to finish the blanks, which were pushed into plug, and two cuts taken over the face with roughing and finishing tools held in turret, and sizing blanks without calipering. A cut was next taken across the face making width 7/8-inch which completed the blank ready for cutting teeth. Teeth were cut on a Whiton hand feed gear cutter, machine being operated by a boy at 75 cents per day. The 90 gears were completed in 9 hours' actual time including setting the tools, and the cost figures are as follows:

9 hours for man @ 20c	\$1.80
9 hours for boy @ 7 1/2c68
	2.48
The blank weighed 88 pounds @ 3 1/2c	3.08

or a total of \$5.56

for the 90 gears. The usual cost of these gears from the maker is 48 cents each, making a total cost of \$43.20, less \$5.56 showing a saving of \$37.64 on this job.

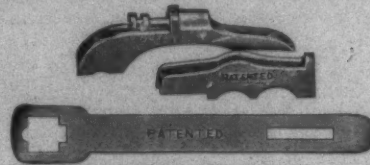
If these gears had been made by the usual method; that is, drilling the hole and reaming by hand, then driven on mandrel and finished in engine lathe, calipering to size both diameter and face, it would have taken at least three days, not only showing a greater cost but also a longer time before they could be put to use.

The writer has for several years been making all repair parts for 800 looms, employing this method, and finds the cost averages a little over 35 per cent less than the same parts purchased from the loom makers. The average number of pieces used is 160 per week and the average weekly cost is \$17.19, or 2 5-100 cents per week per loom. When purchasing repair parts from the loom makers, using the same amount of pieces, the average cost was \$23.20 per week, or a difference of \$6.00 per week. All parts are made in quantities just as they would be if made for sale. They are placed in stock and given out as required, and charged against the section using them, a weekly report being made up showing the number of parts used on each section and cost of same. One copy goes on file in office and another copy is given to the overseer enabling him to get a line on his repair cost and incidentally showing him who is the most efficient section hand. It should be the aim of the up-to-date mechanic to anticipate the needs of the mill, and as far as possible keep repair parts on hand for all needed repairs. I am aware that in a mill of fair size it would preclude the fact of the master mechanic working, as is the custom in some places; but, given the right type of man more can be accomplished by keeping the hands at work than by doing the manual labor himself. The old saying exemplifies this, "The eye of the master can do more than both his hands." I can look back some fourteen years when I arrived at a mill that had been running some six months, to take the place of master mechanic. I found a very well fitted-up machine shop, with good modern tools, some of which had never been belted up. There was one man and a boy in the shop. The man was turning some let-off studs for looms, a piece 3/4-inch diameter, 7 1/2 inches long, made from 7/8-inch stock, there being four different diameters on each piece and one end threaded for nut. The workman was making them in the old-fashioned way, cutting off each piece to length, centering and turning them in engine lathe, calipering each diameter and measuring each length. He said proudly that he was making ten each day. Among the tools was a pretty fair 16-inch turret lathe, not belted up or fitted with any tools. After getting this lathe fitted up, this stud job was out on this machine and after tools were set 70 to 75 of these studs were made in one day by the same workman that had been making ten per day, reducing the labor cost on this item from 10 cents to 2 8-10 cents each. As there were about 1,200 of these studs used yearly this one item alone showed a saving of over \$86.00 and this piece was only one of about 180 pieces per week that were used in this mill. I have in mind now a mill running about 850 modern looms, which is paying out over \$3,000 per year for repair parts on these looms. Just compare this with the 800-loom mill previously cited which is making all

(Continued on Page 18)

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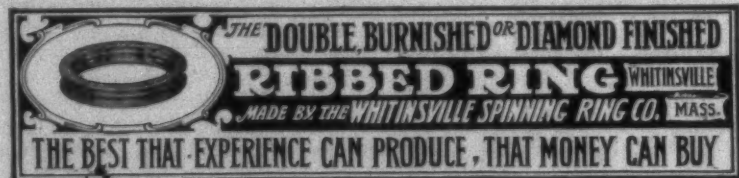
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Piece Work in the Spinning Room

P. A. Smith before Southern Textile Association

Mr. President, Gentlemen, Members of Textile Association:

In preparing this paper on "Piece Rates" versus "Day Rates" as a basis of pay in spinning room, I have not seen fit to elaborate on the relative merits or demerits of either system, as it must be and is conceded by all up-to-date and progressive mill men that the "Piece Rate" system is by far superior to a regular daily wage system. The piece rate acts in a two-fold capacity—in the superior, intelligent and industrious workman it makes room for recognition and reward for merit and superior capacity, while it forces the laggardly, indolent help to hustle or make little wages. The cotton picker in the field no longer gets paid by the day but by the hundred pounds. The woodman gets paid by the cord or thousand feet. Therefore, admitting the superiority of a system of paying for any work by the "piece" rather than by the day, we will consider some practical means of establishing a system of paying "help" by the piece, together with a recapitulation of some results, good and bad.

First we will take the spinning proper. The running of the sides.

To establish a "piece rate" for this work it is first necessary to fix a method of recording the "pieces." This may be accomplished by means of a hank registering clock attached to the front roll, in the same manner as we now see on speeders and slubbers. Put a numeral on each frames in the room and on the time sheet. Credit the sides to the spinner by number. Read the "hank clocks" daily and "mark up" hanks run to the spinner who runs the sides.

Here I will read you a few excerpts from an address on this subject delivered to a class graduating in textile study at Atlanta School of Technology by Mr. Oscar Elsas, vice president of Fulton Bag & Cotton Mills. This mill operates some ninety thousand spindles of various numbers of yarn, all of which is paid for by a system of piece rates.

Mr. Elsas says:

"Our first attempt to establish a 'piece rate' basis of pay in spinning was to equip a room containing 64 filling frames, with a hank registering device. spinners, prior to the adoption of hank clocks were running 4 to 8 sides, dependent on number of yarn and capacity of help.

"Immediately upon the attachment of the clocks a systematic record of production was started. This was continued for eight months, with the purpose of establishing an average production under old conditions. During this time the 'help,' becoming accustomed to seeing the clocks, did not put forth any extra efforts for production. Also, before and during this test period 14 filling frames located in another room were required to produce the necessary amount of filling to operate the looms.

"At the conclusion of eight months of observations, rates were established, base on front speed, number of yarn, quality of stock and so on.

"For example: Spinner A ran 8 sides, No. 22's, front roll speed 132—100 per cent of production on this number being 50 hanks per week. During the period under observation production would average about 40 hanks per week being practically 80 per cent of production.

"When rates established were inaugurated in the mill a gradual improvement was noted through succeeding weeks, till a new high average was noted of 46 hanks per week, or 92 per cent of production being established—a spinner's earnings increasing from \$8.65 per week to \$9.55.

"Spinner 'B' ran 6 sides, No. 19 soft twist, front roll speed 144 turns per minute, 100 per cent production being 54 1-2 hanks per week. Actual production under side basis—44 hanks per week, or 80.7 per cent. Actual production under 'hank' basis, 47 hanks per week; or 86.2 per cent production. Spinner's pay on side basis, \$7.90. Pay on 'hank' basis, \$8.75 per week.

"From the foregoing figures it will be observed that in no case were spinners' wages decreased, and that the increase in production was marked. In fact, the total amount of \$16.20 per week more was paid to the spinners in this small room after the adoption of 'hank' basis of payment.

"To offset this extra cost we were able to change the 14 combination

frames running in another department on filling to warp yarns, thus decreasing cost of filling \$43.55 per week, a net saving of \$27.35 per week in actual labor. The increased production also reduced the fixed charges per pound."

As stated before, this company operates over 90,000 ring spindles, paying on a piece rate basis. I may add also that at this same time a test was made on paying doffers by the piece. The system inaugurated was to give each doffer a check, with stated value for each box, one frame constituting a box. At the commencement of this test it required the assistance of 24 doffers in one room of 64 frames and 4 doffers on 14 frames in another room at a total cost of \$28.00 per day. Under the piece rate basis, 14 filling frames were eliminated and the remaining frames were doffed by 18 boys at an average daily wage of \$1.40 per day, or a saving on doffing of \$9.60 per week and an increase of 40 per cent in doffers' wages.

Furthermore the wages paid under the new system enabled us to get a better class of help, as we now pay a man's wage instead of a boy's wage, thereby getting a man's intelligence on the work, which means better work; and, allow me to say, the mill in which I am employed has a percentage of seconds in weave room of less than one per cent, traceable to some extent to a better class of work done in spinning room, as the piece rate system has allowed us to keep a better class of "help" at a less cost per pound. Or, in other words, the "piece rate" system, if intelligently established, will automatically increase the efficiency of your working force, as it opens the way to remuneration for intensive study so as to increase individual capacity.

For instance, I may mention a specific case in my own experience. I have working for me two doffers who have been on their present jobs several years. Prior to the adoption of piece rates on doffing these boys were doing 18 warp frames, No. 20's yarn, 6-in traverse, 1 5-8-in. ring, at \$1.00 each per day. At present these same two boys are doffing 40 frames and average \$12.00 per week. In this case their wages have been increased 100 per cent, while the cost of doffing has been decreased from 11.1 cents per frame under the old schedule to 10 cents per frame per day under the piece rate system.

But, of greater interest to the company is the fact that these two boys are content to stay on the job, as they now receive pay equal to or above the average day laborer, and this may include street car men and clerks.

As an overseer, I find the piece rate system allows me to balance the capacity of the help with the requirements of the machine. Or, in other words, if it requires 90 per cent of the working capacity of the help to get 75 per cent production capacity of your machinery you are losing money on machinery investment. While on the other hand, if you are only getting 60 per cent or 75 per cent working capacity of help to get 90 per cent capacity of machinery, you are surely badly organized in your labor force, and this condition I find easily remedied by the piece rate system of payment.

I have also found it advantageous to establish a "piece" rate as basis of pay on warpers and creeling warpers and the best way I have found to pay warper tenders is by the warp instead of by the beam. Figure out a rate per warp and keep record of work by issuing a small card with numbers on it, punching out the numerals designating number of yarn, number of warps, and length of warps.

You will find it advantageous to pay for creeling warpers by the 1,000 pounds. This may be done by having a small card with numerals designating number of yarn and the number of ends to each creel. Issue a card to the creeler for every creel tied in and have time keeper check them up at night.

The greatest advantage I've observed in paying for any work by the "piece" is in increased capacity of the help, and by this I do not mean putting forth more physical effort, but rather the piece work acts as an incentive to the individual to eliminate all useless motion and misdirected energy, and your working force will automatically reduce itself. As I found in establishing piece rate on creeling warpers we had 16 machines on coarse numbers,

(Continued on Page 18)

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Relation of Welfare Work to Efficiency

E. H. Foster before Southern Textile Association

Since the day when man was asked to leave the Garden of Eden he has been forced to do something to provide the necessities of life,—hence industry dates from this time. The system of exchange rapidly developed and today we find it in its most complex form. Everybody has something to sell—some, their ability to manage and finance great enterprises, some, their ability to solve great engineering problems, some their ability to supervise a cotton mill and some their ability to run a frame or a set of looms. This system of exchange has made possible the great wealth of our country and the happiness of its people. The character of our ability to produce determines largely our position in life and our value to society.

The word efficiency in some form hangs as a pall over us all. You men are intrusted with your respective mills or rooms to make cloth of some kind, yes, more than that, you are asked to make as much cloth as the capacity of your equipment warrants. To "get production," means that you must have efficient labor. This is your problem. Human efficiency is an economic problem and sanitation, education, recreation and Christianization are the factors that determine it.

At the last meeting of the Southern Textile Association Mr. Bernard Cone of the White Oak Mills said in substance that the last decade was marked by great development of the cotton manufacturing industry both in the enlargement of the industry and character of the product. This is a result for the most part of improved methods, improved machinery and better care of machinery. If the next decade is to see a similar development and it must, it will be because we have improved the character of the human machines in charge of the frames and looms. This means improving the mill, home and village conditions by the introduction of welfare work.

Industry is not giving employment today, but is buying labor. The time thought and expression given to the purchase of machinery is being increasingly given to the purchase and preservation of labor; consequently industry is of necessity interested in the development of that which makes for efficiency, which means welfare work.

Anything that makes for better health, a quickened mind, clean social experience, and above all a Christ-like spirit is welfare work. The pictures to be shown in connection with this brief talk will tell graphically the type of welfare work carried on by the Industrial Department of the Young Men's Christian Association in the cotton mill associations established in the South.

All work is dependent on the physical body for its execution. Action is the watchword of life. Action is the product of muscular contraction. It requires strong muscles to do heavy work; trained muscles to do rapid and careful work; skilled muscles to carry out the suggestions of a trained mind and produce a costly masterpiece. A strong normal body is necessary to do efficiently life's work; sickness, disease, injury, unsanitary surroundings, improper care of the body, bad habits, etc., affect directly the working capacity and skill of the human machine.

At this time there is a certain amount of available help with which to conduct our mills. How important it is from all standpoints that good health should prevail, thereby leaving the maximum fit for work. An epidemic of disease causes great havoc with both the corporation and the operatives and great economic losses as well. Fortunately the diseases that cause greatest loss are preventable. It requires persistent welfare work on the part of us all to eliminate any one of these preventable diseases. Here are a few facts concerning these diseases. Typhoid fever demands 350,000 cases with 35,000 deaths annually with an economic loss conservatively estimated at \$75,000,000. Diarrhoea and associate diseases were responsible for 56,000 deaths in 1908, 85 per cent being children under five years of age. Tuberculosis is responsible for one-tenth of the total deaths in the United States at this time. 50 per cent of our young men are infected with venereal diseases, the final results are found in the asylums, in the hospitals for the blind, and in immature graves. We are infected with these diseases through contamination. The disease germs are carried from filth to our food and drink. The fly is the carrier given credit for carrying the greatest amount of infection. By arousing public interest clean-up campaigns can be started together with "swat the fly" clubs, etc. This rids the community of fly breeding places and greatly lessens the ravages of these diseases. By stimulating flower and vegetable gardening in the community, dirt and filth will disappear and thus not only make for a clean community but an attractive one as well. By means of illustrated talks and demonstrations the value of screen doors and windows as preventive methods against typhoid and malaria, etc., and foul air as a cause of tuberculosis, colds and pneumonia can be shown.

The changing of Panama from a death trap to a health resort clearly demonstrates what sanitary methods persistently employed will do. The ravages of typhoid and kindred diseases among our soldiers during the Spanish-American war, strict sanitary measures not being employed, resulting in a death rate of 1,463 per 100,000 soldiers, as contrasted with the typhoid death rate among the Japanese during the Russo-Japanese war where sanitation was enforced and the death rate was only 25 per 100,000 soldiers clearly demonstrates the possibilities of cleanliness and precaution.

Cleanliness, disinfection, quarantine and other preventive measures should be increasingly employed but this is not enough to produce perfect physical welfare on the part of the individual.

The physical exercise received in doing the usual work of the factory,

office, or mill is not the kind that makes for physical development and healthfulness. During working hours poisons are being formed within the body and are not entirely cast off. As these accumulate the body is rendered less capable of work. It is a fact commonly known that we can do more work in the morning than in the afternoon. Students of scientific management tell us that as much or more work can be done in an eight-hour day as in a ten-hour day in some industries. This illustrates that efficiency is closely akin to physical well-being.

The gymnasium classes with their fast snappy exercises and recreative games, the outdoor sports in which running exercises predominate, raise materially the blood pressure by increasing the heart beat and respiration, thus the accumulated poison is flushed from the system. Many mill men and boys will testify to the benefit received from such exercises.

The cleansing shower bath, increasingly popular, adds elasticity and life to the skin and enables it to do its work of elimination and protection much better.

Frequent illustrated health talks do a vast amount of good in communities where promoted.

A strong healthy body is only the first step to efficiency. Many a yoke of oxen have strong healthy bodies but their usefulness is limited to drawing a plow or cart. The textile industry requires something more. Education is the next step. A healthy body with mind specially trained goes far toward efficiency.

Our cotton mill Y. M. C. A.'s are promoting night classes offering general and special courses. A man capable of reading and writing is more valuable to the mill and himself and family than one who cannot. One of several recent cases in which these classes put a young man in line for a 50 per cent increase in wages in four months time proves this statement. To see men recently unable to recognize a letter reading the newspapers as a result of a short course in the night classes proves their usefulness.

Many mills have adopted the policy of promoting their own men to positions of authority such as second hands, overseers, superintendents, etc. The night classes dealing with the practical work of the mill hasten such promotions and render them less hardous to the parties concerned by equipping the men with the practical knowledge they need in their work.

Such classes as designing and special calculations adapted to weaving and spinning problems not only make the student more efficient but develop in him greater respect and interest in the textile industry—changing him from an automaton to a thinker. He mixes brains with his work.

A class of eleven studied designing at a Y. M. C. A. night school (course of thirty lessons) and of the eleven six received promotion within four months. A member of another class writes, "The night classes at the Y. M. C. A. have made me ambitious. Since attending them I have been promoted from loom fixer to second hand. The desire to read cheap literature has been destroyed." Another writes "I have worked in the mill fourteen years without taking any interest in my work. The good work of the Y. M. C. A. night school got me started. I was promoted from fixer to second hand which position I held two years, was then promoted to a better job as designer. I cannot say too much about the night school." A weave room boss who is teaching designing and calculations in a Y. M. C. A. night school said recently that, were it not for the opportunity this class offers to instruct the men in his room about the problems that are daily arising he could not run the room satisfactorily. Another says "I owe my job to the practical work taught at the Y. M. C. A. night school." To get men to think less about how to shirk a duty and think more about doing good work in the mill, they have to be put in line of promotion. Ambition must be fired within them. These educational classes go far toward lifting a man's horizon and making him feel that there is a chance for him to rise in the industry.

By adding education and especially that kind which deals with the practical work of an industry a big step is taken toward efficiency. Our bodies are so constituted that we tire of doing one thing all the time and work soon becomes more or less automatic. This means that the higher power, the brain, that controls life and activity is less active. Monotony soon undermines a strong healthy body and renders a trained mind less a factor in production. Monotony leads to dissatisfaction; dissatisfaction leads to carelessness and inefficiency; carelessness and inefficiency soon lead to difference with the overseers which ultimately means that the family moves to another mill village.

It is necessary that the machinery in the mills be substantially built to withstand the strain; then, too, that it be built to do properly the work intended. So with the human machine. Health and education are necessary to efficiency. Machinery needs to be cleaned and repaired—re-created frequently. So with the human body. The stress and strain together with accompanying monotony must be broken. Social activities play an important part in maintaining efficiency. The social instinct left to ramble undirected, in many cases soon undermines the physical and mental life, not only of the individual himself but of his associates and the community as well, thus making for the wholesale destruction of efficiency. Rowdiness, immorality, drunkenness, etc., about any industry increases burdens of the overseers because it means trouble in the mill. A welfare program must include the promotion of healthful social

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THURSDAY, DECEMBER 5

Commercial Agents.

W. A. Graham Clark has returned to his former position as Commercial Agent of the Department of Commerce and Labor and is now investigating the cotton goods trade of Canada. Mr. Clark filled this position for four years, making a trip around the world and also covering all of the South American countries. His reports were very widely read and created for him an international reputation.

About two years ago he resigned in order to become textile expert for the Tariff Board and now that the Tariff Board has been abolished he has returned to his former work.

The Department of Commerce and Labor now has two commercial agents in the field, the other being R. M. Odell, of Concord, N. C., who is now in Africa and whose former reports have shown careful work.

We have published during the present year parts of several of the reports made by Mr. Odell and have recently been publishing in more detail his report on Russia.

The Chattanooga Meeting.

While the meeting of the Southern Textile Association at Chattanooga, Tenn., was not as well attended as the meetings in the Piedmont section, it was pronounced by those present to have been one of the most successful and enjoyable meetings that has been held.

The first session was called to order at 8 p. m. Friday, Nov. 29th, by President T. M. McEntire, of Gastonia, N. C. Following this "America" was sung by the entire assemblage. This song was illustrated by slides showing pictures of the beauty of the country as portrayed by the song.

The address of welcome was delivered by President W. E. Brock of the Chamber of Commerce.

Mr. Brock said that Thursday was the day of general thanksgiving all over the nation, and that all had something to be thankful for. He brought this illustration down to the fact that Chattanooga was thankful to entertain the convention of the Southern Textile Association. He spoke of the great im-

portance of Chattanooga as a manufacturing center.

Mr. Brock then told of the natural advantages of Chattanooga, its central location, the Tennessee river and other things which go to make a mighty city. He then welcomed the visitors again in the city and told them that anything they asked for was theirs and to make this their city either for good or while they were within its gates.

A. B. Carter, of Athens, Ga., the silver-tongued orator of the Association, responded to the address of welcome. He said he did not believe that there was a member present who did not know about the energy and push of Chattanooga. If there was any present, however, he said, that did not know, they would be taught before leaving. He paid a beautiful tribute to Chattanooga and to the state of Tennessee. He spoke of the illustrious citizens that have come from the Volunteer State and that their marks on the pages of fame would never be erased. He cordially thanked the citizens and the Chamber of Commerce for their reception of the visitors.

H. M. Evans, secretary of the Chamber of Commerce, then made several announcements. He stated that the courtesies of the Commercial Club were thrown open to the visitors and said that he would issue cards to all who desired to visit the club rooms. He made several announcements about sight-seeing trips and the best methods of getting to see all of the historic beauty of Chattanooga.

President McEntire then delivered his address which was received with the close attention of the members and was much complimented on the expressions and thoughts relative to the textile industry and the Association.

Following the address of the president an interesting illustrated address on "Welfare Work as Related to the Efficiency in the Mill" was delivered by Dr. E. H. T. Foster, industrial secretary of Charlotte (N. C.) Y. M. C. A.

In his address the main feature was the plea for the education of the mill hand—to train him in the benefit and usefulness of sanitation and education.

He used the argument that with education the mill hand is going to try and better himself, thereby bettering his work and the factory.

Saturday Morning.

The Saturday morning session opened at 10:30 and showed a much larger attendance than on the previous night as a great many mem-

bers had not been able to leave their mills on Friday.

The papers read were as follows "Efficiency in Manufacturing," by Garnett Andrews, of Chattanooga, Tenn. Mr. Andrews is manager of a number of mills and his paper was intensely practical.

"Waste, Efficiency and System," by J. H. Bagwell, of Huntsville, Ala. Mr. Bagwell is overseer of weaving at the Merrimack Mills and already had a reputation as a close student and an effective writer. His paper was discussed by T. B. Wallace, F. E. Heymer and others.

"Piece Work in Spinning Room," by P. A. Smith, of Atlanta, Ga. Mr. Smith is overseer of spinning at the Fulton Bag & Cotton Mills and has previously written and published several articles upon the piece work system. His paper was discussed by A. B. Carter, H. P. Meikleham, F. E. Heymer, and Jas. A. Greer.

"Card Room Drafts, Especially Relative to Drawing Frames," by D. E. Trask, of Chattanooga, Tenn. Mr. Trask is a carder of long experience and his paper was interesting and was discussed by W. P. Hamrick and other members.

"System and Costs in Repair Shops," was the subject of a paper to be read by Richard Thirsk, of Cordova, Ala., but he was unable to be present. His paper will, however, be printed.

"Why So Many Changes?" by Jas. A. Greer, of Sylacauga, Ala. This paper by Mr. Greer, who is a mill man of long experience and also author of "Greer's Practical Carder," was one of the most interesting on the program and was discussed at length by H. P. Meikleham, T. M. McEntire, F. E. Heymer, T. B. Wallace and A. B. Carter.

This being the last paper on the program the business meeting was next held.

The resignation of Miss Cranford as official stenographer was received and accepted.

Invitation for place of next meeting were read from Nashville, Tenn., Columbia, S. C., Charleston, S. C., and Gastonia, N. C.

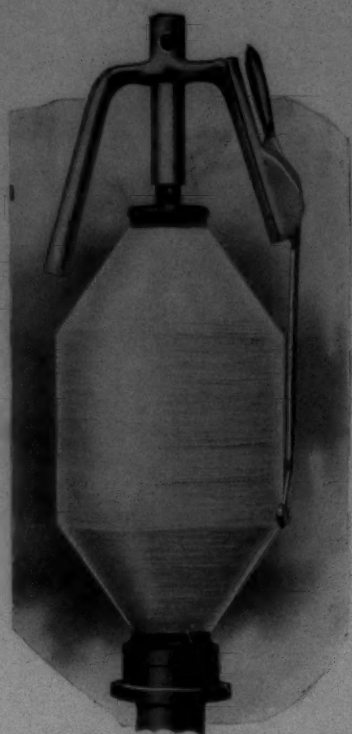
A committee consisting of Alonzo Her, A. B. Carter, W. P. Hamrick, S. C. Thomas and R. D. Thomas was appointed to consider the invitations and decide which to accept. The committee later announced that they had selected Charleston, S. C.

Saturday Night.

The Saturday night session was in the form of a smoker and short talks were made by A. N. Sloan, City Commissioner of Chattanooga; Morris Temple, of the Chattanooga Furniture Co.; C. Woodward, member of the Junior Chamber D. E. Trask, of East Lake, Tenn., and S. A. Sloan of the Sloan Coffee Co.

Resolution of thanks were passed to Chattanooga and its Live Chamber of Commerce.

The meeting finally adjourned with the feeling that the Chattanooga meeting of the Southern Textile Association had been a complete success.



ALWAYS in Balance. Expense of Upkeep, Nothing. Twenty to forty per cent Increase Roving on a Bobbin. Continuous Running. No Changing of Slot for Different Hank Rovings. No Soft Bobbins owing to Poor Tension in Dog-Day Weather. Less Twist required, which allows Higher Speed. No Ends Flying Out of Flyer Leg. A Firmer, Better Built Bobbin with Slack Running Ends. Quicker Piecing. Less Doffing, Handling, Setting In, Piecing and Waste.

Means Increased Quantity and Quality of Output.

Think it over—Ask questions—Decide—Act.

Order your new frame with Dunn Flyer Equipment.

Order your replacement direct from

DUNN FLYER CO.

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Berlin Aniline Works

SOLE IMPORTERS OF THE PRODUCTS MANUFACTURED BY

**Actien-Gesellschaft fuer Aniline-Fabrikation
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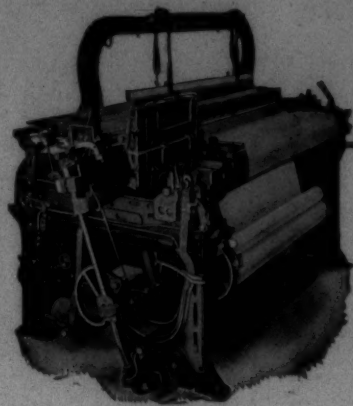
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“Ideal” Automatic Loom

No other loom can equal it in production, quality of cloth, freedom from breakages and repairs and ability to use either cop or bobbin filling.

The STAFFORD COMPANY
READVILLE, MASS.

FRED H. WHITE, Southern Agent, CHARLOTTE, N. C.

BECAUSE we install All Standard Types of Moistening, Heating and Ventilating Systems our engineers are prepared to give your problems Unprejudiced Expert Attention.

They Are Not Paid to exploit the merits of only one system and to demonstrate claimed weakness and shortcomings of all others, but can be depended upon to recommend the one or more types that are **BEST SUITED** to YOUR PARTICULAR NEEDS. These include every system from the simple atomizer head to a centrally operated and automatically controlled duct system of humidifying, heating and ventilating.

AUTOMATIC Control of Moisture and Heat is recommended, no matter what may be the humidifying system employed.

Human Control is not dependable and is never as accurate as **AUTOMATIC CONTROL**. Now that your windows are closed and heat turned on for the winter the need of an accurate automatic control is more strongly felt.

THE AUTOMATIC CONTROLLER installed by THE AMERICAN MOISTENING COMPANY is a practical and dependable instrument of precision that will control the humidity and heat of a room with a variation of less than $1\frac{1}{2}$ per cent. of relative humidity, no matter what may be the climatic conditions.

While extremely sensitive to variations in the atmosphere and very delicate in its control, still, at the same time, it is absolutely **POSITIVE IN OPERATION**, and entirely reliable under any and all conditions.

It "FEELS" or "SENSES" the temperature and moisture of the air.

IT CAN BE APPLIED TO HUMIDIFYING SYSTEMS ALREADY INSTALLED AND WILL GREATLY INCREASE THEIR EFFICIENCY.

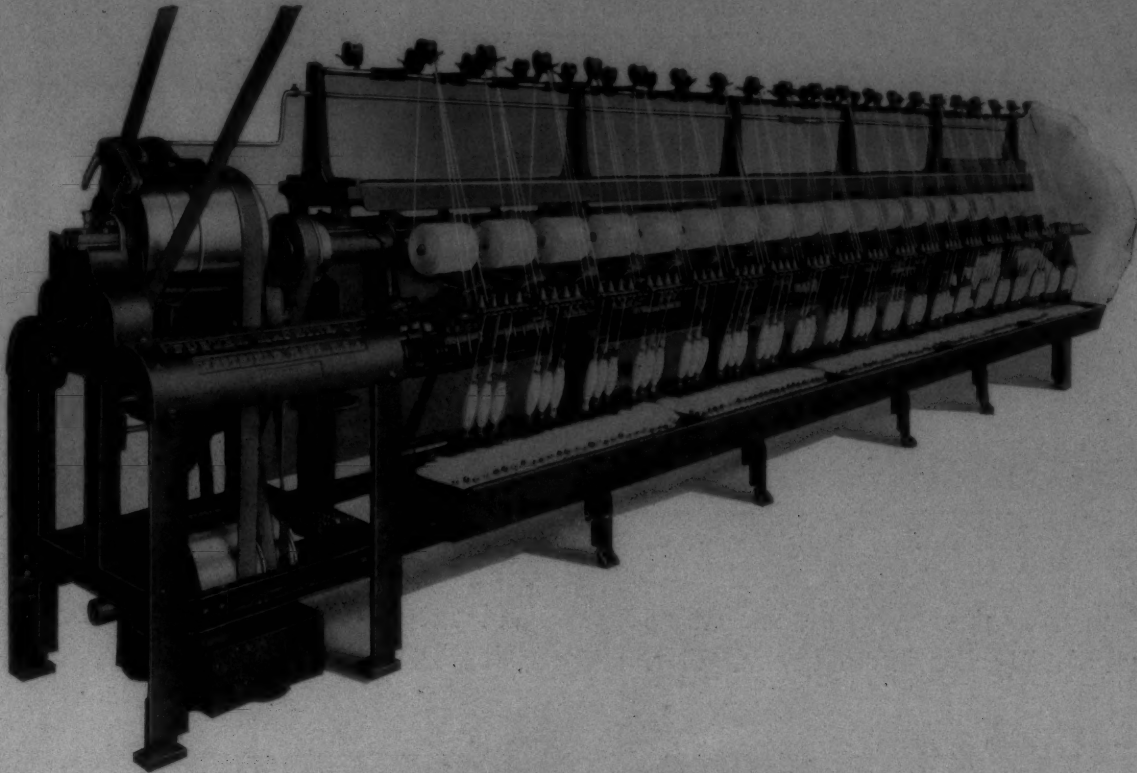
American Moistening Company
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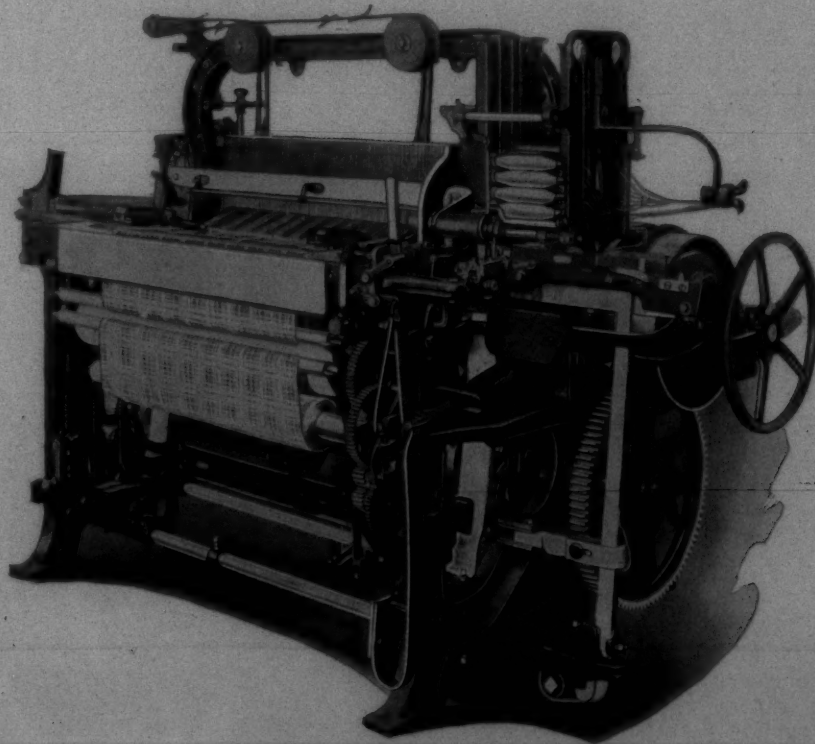


THE FOSTER PARALLELING TUBE WINDER

Perfect ply yarn is not possible unless the strands are paralleled before twisting. The New Foster Doubler has reduced the cost of this process making it applicable to all grades of ply yarns. The following is a partial list of yarn mills that have adopted the Foster Doubler during 1912—Sharpe Mills, Quisset Mills, City Mfg. Corp., New Bedford, Mass. Fitchburg Yarn Co., and Grant Yarn Co., Fitchburg, Mass. Nyanza Mills, Woonsocket, R. I., and Crown Mfg. Co., Pawtucket, R. I.

FOSTER MACHINE COMPANY, - - - - WESTFIELD, MASSACHUSETTS.
JOHN HILL, Southern Agent, 3rd National Bank Building, ATLANTA, GA.

CROMPTON & KNOWLES LOOM WORKS



AUTOMATIC GINGHAM LOOM

One of our latest productions for weaving goods of two or more colors in the filling. Like every loom we build, it has the advantage of a successful mill test.

PROVIDENCE, R. I.

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**BYRD TEXTILE MACHINERY AND
SUPPLY CO.**

DURHAM, N. C.

Manufacturers of and Dealers in

MILL SUPPLIES, MACHINERY, ETC.

N. C. SELLING AGENTS

DOUGLAS & CO'S. MILL STARCHES.**CARDS,
DRAWING,****COTTON
MILL MACHINERY****SPINNING
FRAMES,****MASON MACHINE WORKS**

TAUNTON, MASS.

EDWIN HOWARD, Southern Agent
Charlotte, N. C.**COMBERS,
LAP MACHINES****MULES,
LOOMS.****PERSONAL NEWS**

A. E. Osborne is now overseer of carding at the Seneca (S. C.) Mills

C. D. Goodroe has resigned as overseer of carding at the Sycamore (Ala.) Mills.

J. M. Glass has resigned as overseer of carding with the Griffin (Ga.) Mfg. Co.

W. H. Brooks, formerly of Pineville, N. C., is now fixing looms at Chester, S. C.

J. A. Thompson is now overseer of carding at the Union Cotton Mills, LaFayette, Ga.

P. T. Sparks has resigned as overseer of carding at the Shawmut (Ala.) Mills, and is now farming.

League Lashley has accepted the position of carder and spinner at the Glencoe Mills, Burlington, N. C.

W. J. Moore has resigned as loom fixer at the Victory Mill, Fayetteville, N. C.

Walter Manuss has resigned as second hand in spinning at the Victory Mill, Fayetteville, N. C.

Irwin Lett has accepted the position of second hand in spinning at the Victory Mill, Fayetteville, N. C.

W. E. Fleming has been promoted to second hand in weaving at the Easley (S. C.) Mills.

C. J. Riddle of Concord, N. C., has accepted the position of machinist at Sanford, N. C.

J. W. Russell has resigned as overseer of winding at Thomasville, N. C.

J. A. Pace has resigned as overseer of carding at the Seneca (S. C.) Mills, and moved to Central, S. C.

Wm. Sullivan has resigned his position with the Clifton (S. C.) Mills, and is now with the Arkwright Mills, Spartanburg, S. C.

J. M. Greedmore, overseer of spinning at the Southern Mfg. Co., Athens, Ga., now has charge of the carding also.

C. T. Hardin, of Chester, S. C., has accepted the position of overseer of weaving at the Granby Mill, Columbia, S. C.

J. C. Keller, of Kings Mountain, N. C., has accepted the position of overseer of carding and spinning at the Aurora Mills, Burlington, N. C.

J. M. Carroll, of Abbeville, S. C., has accepted the position of overseer of weaving at the Orangeburg (S. C.) Mfg. Co.

L. B. Norton has resigned his position with the Oconee Mills, Westminster, S. C., and is now with the Walhalla (S. C.) Mills.

J. L. Riddle, of Greensboro, N. C., is now overseer of spinning, spooling and warping at the Meritas Mills, Columbus, Ga.

C. A. Singleterry, of Roanoke, Ala., has accepted the position of overseer of carding at the Shawmut (Ala.) Mills.

J. B. Lindsey has resigned as loom fixer at the Dennison (Tex.) Mills, and has a similar position at the Texas Mills, McKinney, Tex.

A. F. Owens, from the White Oak Mills, Greensboro, N. C., is now fixing looms at the Eno Mill, Hillsboro, N. C.

E. E. Dickert has been promoted from overseer of slashing to night overseer of weaving at the Arcade Mills, Rock Hill, S. C.

J. P. Mitchell has resigned his position with the Harborough Mfg. Bessemer City, N. C., to accept a position in Atlanta, Ga.

— — Campbell has resigned as second hand in spinning at the Glen River Mills, Burlington, N. C., and is now located in Danville, Va.

J. E. Owens of Pelzer, S. C., has accepted the position of overseer of carding at the Hutcheson Mfg. Co., Banning, Ga.

H. C. Moore has resigned as overseer of carding with the Holland Mfg. Co., Gastonia, N. C., to become superintendent of the Tuckasee Mfg. Co., Mt. Holly, N. C.

H. P. Puckett, formerly with the Dorothy Mfg. Co., Dallas, N. C., is now overseer of carding and spinning at the Holland Mfg. Co., Gastonia, N. C.

Alfred Barnes, formerly overseer of carding at the Eagle and Phenix Mills, Columbus, Ga., now has a similar position with the Griffin (Ga.) Co.

Lee Busbee has resigned as second hand in weaving at the Mills Mfg. Co., Greenville, S. C., to become overseer of weaving at the Courtenay Mfg. Co., Newry, S. C.

J. B. Bailey has resigned as overseer of carding at the Coosa Mfg. Co., Bon Air, Ala., to accept a similar position at the Sycamore (Ala.) Mills.

W. M. Briggs has returned to his former position as overseer of spinning at the Kinston (N. C.) Cotton Mills.

C. N. Harper, formerly overseer of weaving at the Gibson Mill, Concord, N. C., has accepted a similar position at the Pomona Mills, Greensboro, N. C.

B. L. Ledwell, formerly superintendent of the Belmont Mills, Shelby, N. C., has accepted position as assistant superintendent at the Knoxville (Tenn.) Spinning Mill.

J. L. Hope has resigned as superintendent of the Delburg Mills, Davidson, N. C., to accept a similar position at the Shaw Mills, Weldon, N. C.

C. A. Hodges has resigned as overseer of weaving at the Dallas (Tex.) Cotton Mills to accept a similar position at the Texas Cotton Mills, McKinney, Texas.

John M. Manley, formerly with the Edna Mills, Reidsville, N. C., has become overseer of weaving at the Inverness Mills, Winston-Salem, N. C.

Robt Rudler has resigned as overseer of spinning at the Kansas City (Mo.) Mills and is now overseer of carding and spinning at the Brazos Valley Mills, West, Texas.

J. C. Robertson, formerly with the Paola Mills, Statesville, N. C., is now overseer of carding and spinning at the Inverness Mill, Winston-Salem, N. C.

J. P. Hartsoe has resigned as superintendent of the Weldon (N. C.) Cotton Mfg. Co. to accept a similar position at the Delburg Mills, Davidson, N. C.

OVERFLOW PERSONALS PAGE 16**Cramer System of Air Conditioning**

WITH OR WITHOUT

Automatic Regulation of Humidity and Temperature

Moderate in Cost

Cheap to Operate

Yields Big Returns

STUART W. CRAMER

CHARLOTTE,

NORTH CAROLINA

MILL NEWS ITEMS OF INTEREST

Macon, Ga.—The Manchester Mills will install additional machinery at their plant. The contract for the new equipment has been placed.

Shawmut, Ala.—The Shawmut Cotton Mills have completed the erection of twenty additional cottages for their operatives.

Rockwell, N. C.—A new boiler has arrived and is being installed at the Barringer Manufacturing Co. More power is required for the mill since they increased their equipment.

Hillsboro, N. C.—The Bellevue Cotton Mills were damaged by fire last week. The damage is estimated at \$8,000.

Hendersonville, N. C.—The Freize Hosiery Mills have decided to double their capacity. At present the company is operating 40 knitting machines.

Helena, Ark.—It is reported that the Premier Mills, of Barton, Ark., will build a plant at this place for the manufacture of cotton cloth and thread.

Hillsboro, N. C.—The Bellevue Manufacturing Co. have begun the work of rebuilding their dyehouse which was destroyed by fire.

Rome, Ga.—The Harbour Manufacturing Co., manufacturers of overalls, have changed their corporate name to the Union Manufacturing Co.

Kannapolis, N. C.—The Concord Furniture Co. has been awarded the contract to furnish the new offices of the Cannon Mill with Globe-Wernicke office furniture.

Rossville, Ga.—The Richmond Hosiery Mills have increased their capital stock by an additional \$100,000, to be paid in prior to January 1, 1913. This will give the mill a capital stock of \$450,000.

Pulaski, Va.—The Chamber of Commerce is negotiating with New Jersey silk manufacturers relative to establishing a mill at this place. They are planning to erect a building with a floor space of 60,000 square feet.

Kernersville, N. C.—The American Hosiery Mills will soon complete the work of rebuilding their plant, which was burned last July. Its new building is 225 feet long by 60 feet wide, of mill construction. The building will cost \$25,000 and will be equipped with 400 knitting machines, steam power plant, etc., for the manufacture of 200 needle goods, whole and half goods. The company will employ about 250 operatives.

Emmitsburg, Md.—The Union Manufacturing Co., of Frederic, have leased a building at this place and will install 30 knitting machines, etc. The equipment has been purchased. The concern manufactures hosiery.

Loudon, Tenn.—The Loudon Hosiery Mills is reported running both day and night. The mill has been enlarged twice since its erection six years ago, and is now employing over 225 people in its different departments.

Charleston, S. C.—The Charleston Bagging Manufacturing Company has awarded contract to Herndon and Singleton, of this city, for the erection of 4 homes for operatives. The houses will be of ordinary construction and the cost will be 30,000.

Fresno, Cal.—The Fresno Chamber of Commerce is authority for the statement that William Gray Maxwell, of San Francisco, is contemplating the establishment of a plant here for the manufacture of knit underwear.

Bull's Gap, Tenn.—It is stated that cotton manufacturers are investigating this locality as a location for a cotton mill. A site for the mill, if built, will probably be secured for the property of W. H. Addington.

Norfolk, Va.—The Andre Silk Co has been incorporated with a capital stock of \$500,000. The officers of the new company are Walter H. Taylor, president; William C. Dickson, vice-president, and J. P. Andre Mortue, secretary and treasurer.

Los Angeles.—New machinery has been installed in the factory of the Wittenberg Co., manufacturer of hosiery, 326-328 South San Pedro street, and the plant is now in full operation. Facilities have been provided not only for knitting all grades of men's and women's hose but also for dyeing, etc.

Mayodan, N. C.—News has been received here that H. M. Daniels and William R. Rietheimer, representatives in Philadelphia for the yarn product of the Mayo and Avalon Mills, will sever their connections with the mills, it is stated, on Jan. 1.

Maryville, Tenn.—Knox Burger has purchased a half interest in the Maryville Hosiery Mills, the purchase being made from R. H. Oliver, who owned the entire stock. It is said that the price paid was \$15,000. Mr. Oliver will retain one-half interest in the concern and will continue to act as president. The plant will be considerably enlarged in the spring.

Tryon, N. C.—Permanent organization has been perfected by the Tryon Hosiery Mfg. Co., which was incorporated a few weeks ago to take over the Tryon Hosiery Co.'s plant at Lynn, which is equipped with 250 knitting machines and accompanying machinery for the manufacture of men's, women's and children's fine grade seamless hosiery.

Concord, N. C.—Machinery is being placed in the new addition at the Franklin Mills and in a few weeks it will be put in operation. The addition, 75x202 feet and practically doubles the size of the mill. Thirty-eight new houses have lately been erected at the mill. They all have electric lights, and all of the old houses in the village are being wired.

Baltimore, Md.—Plans for refinancing the International Mills Corporation, the world's largest manufacturer of cotton duck, took shape here last week. In brief, they provide for the organization of a new company under the laws of Massachusetts with a capital of \$14,000,000 common and preferred stock, and an issue of notes of between \$8,000,000 and \$6,000,000.

The \$2,000,000 in outstanding notes of the present company are to be retired.

The purpose of the plan, it is stated in effect, is to provide additional working capital.

S. Davies Warfield, chairman of the board of directors of the corporation, said that it was premature to make any official announcement in connection with the matter, but he gave, in a statement, some of the plans as far as they had gone he said.

The plans proposed provide: A new company under the laws of Massachusetts with capitalization approximately as follows:

Two million dollars 7 per cent first preferred stock (cumulative); \$6,400,000 6 per cent second preferred stock (cumulative after three years), and \$5,600,000 common stock.

An issue by the new company of \$5,000,000 or \$6,000,000 three-year per cent notes, the \$2,000,000 outstanding international notes to be retired.

Mr. Warfield said that the plan also contemplated that Boston men of high standing, both in financial and textile circles, would be on the board of directors of the new company and active in its management.

Louisville, Ky.—According to information received from this place the American Woolen Co., has arranged to take charge of the plant of the Bradford Worsted Spinning Co. in bankruptcy as reported on Jan. 1.

The American Woolen Co., it is provided in the papers finally sign-

ed, will lease the plant for six months with the further privilege of a six months' extension at a slightly reduced rental, it is stated. A \$110,000 issue of first mortgage bonds, covering the preferred indebtedness will be made the first of the year, according to the report, also a \$200,000 issue of second mortgage bonds covering the general indebtedness.

C. C. Stoll, Henry Anderson and R. G. Morton, it is further stated compose the stockholders' committee, which completed the contract with the American Woolen Co., acting with the approval of the creditors' committee, including Oscar Fenley, Ben Rosenbaum and S. Davis.

It will be recalled that an involuntary petition in bankruptcy was filed against the Bradford Worsted Spinning Co. following the discovery of an impairment of capital of \$163,539, and the mill was closed on June 30. A committee was appointed to devise ways and means of winding up or reorganizing the business. Previous reports from here said that the American Woolen Co. had partly completed arrangements whereby it would rent the Bradford company's plant for a trial period of six months, but the reports, as noted before in this paper, could not be confirmed at the Boston office of the American Woolen Co.

Hosiery Mills Sue Railroad.

A suit has been instituted in the superior court of Forsyth county, N. C., against the Southern Railway Company to recover in damages \$99,950. It is brought by Kerner Brothers of Kernersville, trading as the American Hosiery Mills. The destruction of the later's plant sometime ago is alleged to have been caused by sparks from an engine operated by the defendant company that said locomotive was defective and without a spark arrester.

Pelzer Company Lost Cotton Suit.

Meridian, Miss.—Holding that the South Carolina statute which forbids the shipment of cotton into that state from a state infected by the boll weevil to be unconstitutional and violative of the interstate commerce laws, Chancellor Whitmon awarded Newberger & Levy, cotton dealers of this city \$7,694.95 damages because of the refusal of the Pelzer Mfg. Co., of Pelzer, S. C., to accept a shipment of contract cotton. The case will be fought through the courts as a test of the constitutionality of the South Carolina law.

Ordered Delivery of Goods.

In the United States district court at Charleston, S. C., an order has been granted for the delivery

of 52 bales of cotton cloth to Grinnell, Willis & Co., of New York, by the Glenwood Cotton Mills, which has been holding the goods as bail for Woodward, Baldwin & Co., or Warner, Godfrey & Co., two firms recognized in the sale of the goods. Warner, Godfrey & Co., however, had sold the goods to W. A. Hinchman & Co., of New York, which in turn sold the merchandise to the plaintiff in the present action. The business of W. A. Hinchman & Co., being placed under the supervision of a committee of creditors later, they could not deliver the goods and Grinnell, Willis & Co. sought the federal court for relief. The order directs the delivery of the goods to the plaintiff, but gives leave to the interested parties to proceed further in adjudicating their differences.

Cutting at Lancaster.

An affray in which pocket knives were freely used occurred Saturday night in the mill village, Lancaster, between Verne Adams and Will Hearst, two young white men of this place. Adams was seriously cut in the throat and neck, and Hearst received several small cuts in his back and on right arm. Both have been arrested and are in the custody of the police.

Alfred Moore President.

At a meeting of the Riverside and Toxaway Mills, held at Anderson, S. C., Tuesday afternoon, Capt. Ellison A. Smyth submitted his resignation as president and treasurer, and Alfred Moore was elected in his stead. Capt. Smyth also resigned from the board of directors, as did Messrs. J. Adger Smyth, Jr., and D. L. Blake, and Messrs. T. E. Moore, W. C. Cleveland, Jas D. Hammett and Alfred Moore were elected to the vacancies.

The change in the presidency of the mills will mean that Mr. Moore will have to spend a good deal of his time at Anderson, but for the present at least, he will not move there.

Mr. Moore is president of the Jackson Mills at Iva, and also of the Lockhart Mills at Lockhart.

The Riverside and Toxaway Mills are now in good condition, and a large addition is now being erected to the plants, materially enlarging the former output.

Crop Estimate.

New Orleans, Dec. 1.—This season's cotton crop will total 13,975,000 bales, according to estimates compiled by the New Orleans Times-Democrat from a canvass of reports from correspondents in every cotton growing state.



Couldn't Run Without The Turbo

Any good humidifier might have this said of it, but this story happens to be about

THE TURBO HUMIDIFIER

Said one Super: "We couldn't have run last year without the Turbo. I know that sounds funny to you because we got along without it for so many years; but in 1911 while the cotton crop was large it was poor. Moreover, we didn't get what we ordered; were just as apt to have 7-8 inch staple run in with 1 18 inch as not. The Turbo kept us going. I proved it several times by shutting 'em down for a couple of hours.

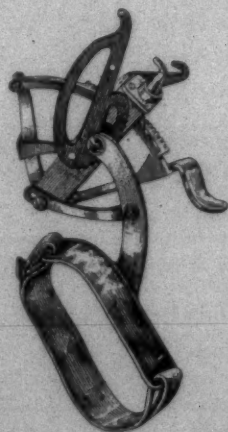
Get Turbofied—and satisfied.

THE G. M. PARKS CO.
FITCHBURG, MASS.

Southern Office, No. 32 East Trade St., Charlotte, N. C.
B. S. COTTRELL, Manager

The Byrd Knotter

Price \$20.00



Simple of Operation
Durability Guaranteed
Small Repair Cost

Byrd Manufacturing Co.
DURHAM, N. C.

This estimate doesn't include linters and repacks. The correspondents generally report that the farmers have been free sellers at current prices. The crop, it is stated, has been picked and ginned with unusual rapidity.

The Times-Democrat figures on production by states as follows:

Alabama	1,250,000
Arkansas	850,000
Georgia and Alabama	1,909,000
Louisiana	450,000
Mississippi	1,100,000
Oklahoma	1,100,000
North Carolina	950,000
Tennessee	275,000
South Carolina	1,250,000
Texas	4,750,000
All other states	100,000

Total... 13,975,000

Visible Supply of American Cotton.

November 22, 1912	4,667,516
Previous week	4,455,408
This date last year	4,032,578

Weekly Cotton Statistics.

New York, Nov. 29.—The following statistics on the movement of cotton for the week ending Friday, November 29, were compiled by the New York Cotton Exchange:

WEEKLY MOVEMENT.

	This yr
Port receipts	459,602
Overland to mills and Canada	60,009
Southern mill takings (estimated)	100,000
Gain of stock at interior towns	45,575

Brought into sight for the week... 665,186
TOTAL CROP MOVEMENT.

Port receipts	5,420,472
Overland to mills and Canada	287,669
Southern mill takings (estimated)	970,000
Stock at interior towns in excess of Sept. 1	548,643

Brought into sight thus far for the season... 7,226,784
968 bales added to receipts for season. Last year's figures not available.

An Albemarle Affray.

A shooting affair occurred Monday near the Wiscasset Mills, Albemarle, N. C., when S. A. Stacks shot, and is said to have seriously injured Arthur Mills. A shotgun was the weapon which Stacks used, having fired three shots, one of which is reported to have taken effect. The trouble commenced when Mills is said to have gone into the home of Stacks and attempted to shoot him.

AMERICAN MOISTENING COMPANY

BOSTON, MASSACHUSETTS

WILLIAM FIRTH, President

FRANK B. COMINS, Vice-Pres. & Treas.

THE ONLY PERFECT SYSTEM OF AIR MOISTENING
COMINS SECTIONAL HUMIDIFIER

JOHN HILL Southern Representative, Third Nat. Bank Building, ATLANTA, GEORGIA

SYSTEM AND COSTS IN THE REPAIR SHOP.

(Continued from Page 7)

its loom repairs for approximately \$1,000 per year, a difference of \$2,000 on looms alone. More than enough to cancel the master mechanic's wages.

Now, a few words in reference to the qualifications of the master mechanic in a modern mill. In the first place he should be a thoroughly practical mechanic, able to perform any job that comes to the shop and to do so quickly and well. Not necessarily, that he should have to do so, but to enable him to see that his men are using the best methods and to correct them if found doing otherwise. I have come across cases where the master mechanic was a mere figure head and had to rely entirely upon the skill and judgment of his subordinates. Happily this class of men are rapidly becoming obsolete. He should have a good knowledge of steam engineering, both in practice and theory, also a good working knowledge of electricity, so that it matters not what power is used his knowledge would be equal to the occasion. All shafting, main belts, and other apparatus used should be periodically inspected to guard as far as possible against a shut down during working hours. Of course there will be accidents and stoppages that every precaution will not eliminate, but a great many may be avoided by a good system of inspection. As a matter of fact the master mechanic should aim to be a preventer of repairs, rather than a repair maker.

Just a few words on the question of supplies. In a small mill this may very well be handled by the superintendent, but in the larger mills the supplies should be under the jurisdiction of the master mechanic.

The writer has had the purchasing and distributing of supplies for the past eight years, and has adopted the following system: A supply room 32x48 ft. has been fitted up over the machine shop, and is in charge of a competent man who is on duty all day to give out supplies. The card index system is used, there being a card for every article used. On this card is entered the date of receipt of goods together with invoice price and cost per piece. On the same card is entered from time to time the amount given out, and the party or department receiving it and the cost of same. These cards are footed up every month and a monthly statement made out for the office, showing amount of supplies received, amount given out, to whom given, and cost of same. The supplies on hand are carried forward to another card to be used the following month. It is a very simple matter to ascertain in a very few minutes just what supplies are on hand, how much has been used, and the cost at any time. Our supply room inventories about \$5,000 and contains about everything used in a textile plant. Under the system, or rather, lack of system that was in vogue prior to the one now in use, each overseer had a supply room and ordered his own supplies, and in many cases there were plenty of supplies on hand in some rooms whilst others were in need but could not get them, as they were being charged against the room ordering them, and the overseer who had supplies would not let another room have any of his. With the system in use now, there is no need for an overseer to have a supply room, and as one man handles all the supplies there is never a lack of supplies on hand.

PIECEWORK IN THE SPINNING ROOM.

(Continued from Page 8)

which were being creeled by 4 creelers at \$1.20 per day each. The average production was approximately 100 section beams per week, or 41,000 spools per week to be tied-in. On this estimate a rate of 65 cents a 1,000 was put in effect. Total pay under old schedule \$7.20 per week. Total pay under piece rate \$6.65 per week. It may be seen that the old rate was more than the new rate per hand for the weekly earnings.

This difference was made because it was seen there was an abnormal rate being paid for this work and it finally worked itself out just as it was figured it would do, which was this way—after the third week, under the new, piece rate, three of the best creeler hands asked the privilege of doing all the work, which was just what we wanted. These three hands now have an average weekly pay of \$8.50 to \$9.00, with this advantage to the company, that there was one hand eliminated and a saving of \$2.15 per week in creeling, and we can still keep the places filled more readily, cause it is easier to employ a creeler at \$8.50 or \$9.00 per week than it was at \$7.20.

Now, it has not been my purpose to stand up as an expert in efficiency or in theoretical nonsense—because I think it is easy to make things look good on paper. I've had the good fortune to run into some theoretical figure-heads that could get you down and pour water in your ear and make you think it had rained, but it didn't make the grass grow. I say "good fortune" because it helps me to pick out the good from the bad.

It has been my experience that paying by the "piece" is just as feasible in the spinning room as it is in the weaving, and just imagine what would happen in your weaving department if orders were issued to pay all weavers by the day.

In inaugurating a new system of paying help by the piece, some of the first and greatest obstacles to be overcome are indifference and outspoken antagonism to anything new, even from foremen down. There are so many who want to do "like I always did." The new system may be beautifully perfect and then fall flat because of your inability to overcome old traditions in the minds of your workmen. Don't make your system so elaborate that it cannot be grasped in its minutest detail by the average intelligence of your working force. The successful foreman will and must consider each person under him as a separate and distinct individual, and instead of being a slave to his work he should make his work a game and play each unit under him to win.

I thank you.

GRINNELL WILLIS & COMPANY

44-46 Leonard Street, New York

SELLING AGENTS

BROWN AND BLEACHED COTTON GOODS FOR HOME EXPORT MARKETS

RICHARD A. BLYTHE

(INCORPORATED)

Cotton Yarns Mercerized and Natural

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College of Agriculture and Mechanic Arts

THE STATE'S INDUSTRIAL COLLEGE

Four-year courses in Agriculture; in Civil, Electrical, and Mechanical Engineering; in Chemistry; in Cotton Manufacturing and Dyeing. Two-year courses in Mechanic Arts and in Textile Art. One-year and Two-year courses in Agriculture. These courses are both practical and scientific. Examinations for admission are held by the County Superintendent at all county seats on July 11th.

For Catalog address

THE REGISTRAR,
West Raleigh, N. C.

The Desirability of the South

as the place to manufacture cotton goods is illustrated in the increase of 67% quoted by census department. We can offer attractive situations for those desiring to enter this field.

J. A. PRIDE

General Industrial Agent, Seaboard Air Line Railway

NORFOLK, VIRGINIA.

UP TO YOU TO BE UP-TO-DATE

In Bleaching, Dyeing, Finishing

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BOSSON & LANE

Works and Office

ATLANTIC, MASS.

The Yarn Market

Philadelphia, Pa.—While the buying in the yarn market was conservative last week, there was a fair volume of new business put through. Some houses who were able to undersell their competitors did a very good business. Many dealers report that November was the best month they have ever known in the yarn business. The receipts of yarn from the South were large, with most of it being delivered as soon as it arrived.

A very good volume of business has been booked for next season by underwear and hosiery manufacturers and they are reported to be doing a good business. However, the steady advance in cotton and yarn prices makes them feel rather uneasy, as a continuation of the upward price movement may force them to advance the price of their goods.

There was only a light demand for combed yarns during the week. Some dealers said that they found it hard to get yarns, while others said that prices were so high that they could not sell more than a few cases at a time.

Eastern mule spun 24s cones were sold for 3 0 to 30 1-2 cents, and Southern spinners quoted the same number of frame spun at 31 to 32 cents. Eastern 60-2 cones sold for 58 to 5 cents, and Southern 60-2 were sold for 56 to 60 cents. Single 60s on cones sold for 56 to 58 cents.

Weavers are buying conservatively. Few, if any, are taking more than they need to fill in with, while a number of the larger manufacturers are covered until March 1st and are not buying now. Prices are advancing so rapidly that the average weaver is afraid to buy more than from hand to mouth.

Southern Single Skeins.

4c to 8s	18 1/2-2
10s	19 —
12s	19 —19 1-2
14s	20 —20 1-2
20s	21 1-2-22
26s	23 1-2-24
20s	26 1-2

Southern Two-Ply Skeins:

8s	19 —
10s	19 1-2
12s	20 —20 1-2
14s	20 1-2-21
16s	20 1-2-21 1-2
20s	22 1-2-23
24s	24 —
26s	24 1-2-25
30s	27 —
40s	37 1-2-38
50s	46 —47
60s	51 —

Carpets and Upholstery Yarn in Skeins:

3-4	19 —
3-4 slack	19 1-2
8-3 and twist	18 1-2-19

Southern Single Warps:

8s	19 —
10s	19 1-2
12s	20 —
14s	20 1-2
16s	20 —20 1-2
20s	21 1-2-22
24s	23 1-2-24
26s	24 1-2
30s	26 1-2-27
40s	37 —38

Southern Two-Ply Warps:

8s	19 —19 1-2
10s	19 1-2-20
12s	21 —21 1-2
14s	21 1-2
16s	22 —22 1-2
20s	23 —23 1-2
14s	24 1-2-25
26s	25 1-2
30s	27 1-2-28
40s	38 —39
50s	46 —47

Southern Frame Spun Yarn on Cones

8s	19 1-2
10s	20 —20 1-2
12s	20 1-2-21
14s	21 —
16s	21 1-2
20s	22 —22 1-2
22s	22 1-2-23
24s	23 —23 1-2
26s	23 1-2-24

Two-Ply Carded Peeler in Skeins:

20s	25 1-2
22s	26 —
24s	26 1-2
26s	26 1-2
30s	27 1-2-28
30s 1 t's	35 —
36s	34 —
40s	37 —37 1-2
50s	44 —45
60s	50 —51

Single Combed Peeler Skeins:

20s	28 —29
24s	30 —
30s	33 —34
40s	40 —41
50s	46 —50
60s	54 —57

Two-Ply Combed Peeler Skeins:

20s	29 —31
24s	31 —33
30s	35 —
40s	42 —44
30s	25 —
50s	48 —54
60s	55 —60
80s	76 —80

A. M. Law & Co. F. C. Abbott & Co.

Spartanburg, S. C.
BROKERS

Charlotte, N. C.
BROKERS

Dealers in Mill Stocks and other Southern Securities

South Carolina and Georgia Mill Stocks.

	Bid	Asked
Abbeville Cot. Mills, S. C.
Arcadia Mill, S. C.	91	93
Amer. Spin. Co., S. C.	154	...
Anderson Cot. M., pfd.	90	...
Aragon Mills, S. C.	...	65
Arcadia Mills, S. C.	91	...
Arkwright Mill, S. C.	100	...
Augusta Factory, Ga.	...	43
Avondale Mills, Ala.	115	120
Belfon Cotton Mills	102	105
Brandon Mills, S. C.	...	85
Brogan Mills	55	61
Calhoun Mills, S. C.	...	51
Chiquola (new)	100	...
Clifton Mfg. Co., S. C. pf	85	100
Clifton Mfg. Co., S. C. p	98	100
Clinton Cot. Mills, S. C.	125	...
Courtenay Mfg. Co., S. C.	...	90
Columbus Mfg. Co., Ga.	92 1/2	100
D. E. Converse Co., S. C.	75	...
Dallas Mfg. Co., Ala.	...	110
Darlington Mf. Co., S. C.	...	75
Drayton Mills, S. C.	...	90
Eagle & Phenix M. Ga.	106	...
Easley Cot. Mills, S. C.	165	...
Enoree Mfg. Co., S. C.	25	...
Enoree Mfg. Co., S. C. pf	...	100
Enterprise Mfg. Co., Ga.	65	70
Exposition Cot. M'ls, Ga.	...	210
Fairfield Cot. Mills, S. C.	...	70
Gaffney Mfg. Co., S. C.	65	75
Gainesville C. M., Ga.	...	65
Glennwood Mills, S. C.	...	141
Glenn-Lowry Mfg. Co., S. C.	...	101
Glenn-Lowry Mfg. Co., S. C. pfd.	...	86
Gluck Mills, S. C.	...	80
Graniteville Mfg. Co.	140	147
Greenwood C. M., S. C.	...	57
Grendel Mills, S. C.	...	95 102
Hamrick Mills, S. C.	...	102
Hartsville C. M., S. C.	170	...
Inman Mills, S. C.	...	105
Inman Mills, S. C. pfd.	...	100
Jackson Mills, S. C.	...	95
King, Jno. P. Mfg. Co., Ga.	...	87
Lancaster C. M., S. C.	130	...
Lancaster C. M., S. C. pd	98	...
Langley Mfg. Co.	70	75
Laurens Cot. Mills, S. C.	...	120
Limestone C. Mills, S. C.	143	...
Lockhart Mills, S. C.	...	70
Loray Mills, N. C., com.	10	...
Loray Mills, N. C., 1st p	...	100
Marlboro Mills, S. C.	60	75
Mills Mfg. Co., S. C.	110	...
Mollohon Mfg. Co., S. C.	...	105
Monarch C. Mills, S. C.	110	...
Newberry C. H., S. C.	135	140
Ninety Six Mills, S. C.	135	140
Norris Cotton Mills	103	...
Orangeburg Mfg. Co., S. C. pfd.	...	90
Orr Cot. Mills, S. C.	...	71
Ottarway Mills, S. C.	...	100
Oconee Mills, S. C., com.	...	100
Oconee Mills, S. C., pfd	...	100&int
Pacolet Mfg. Co.	94	100
Pacolet Mfg. Co., pfd.	...	100&int

southern Mill Stocks, Bank Stocks
N. C. State Bonds, N. C. Railroad Stock and Other High Grade Securities

North Carolina Mill Stocks.

	Bid	Asked
Arista	80	...
Avon	...	100
Brookside	...	112
Brown, common	...	115
Brown, preferred	100	...
Cabarrus	125	130
Cannon	120	150
Chadwick-Hoskins	...	95
Do. Pref	...	101
Clara	...	110
Cliffside	180	200
Cora	100	...
Efird	...	125
Erwin	123	125
Erwin Pref.	102	...
Gaston	...	90
Gibson	95	100
Gray	...	121
Florence	...	126
Highland Park	...	200
do. pref.	...	101
Henrietta Mills	150	155
Kesler	125	...
do. pref	...	91
Loray	...	10
Loray, preferred	...	90
Lowell	...	181
Lumberton	...	251
Marion Mfg. Co.	...	100
Mooresville	142	150
Modena	...	100
Nakomis	...	200
Patterson	118	126
Raleigh	100	104
Roanoke	...	155
Salisbury	130	134
Statesville Cot. Mill	...	96
Trenton	...	120
Tuscarora	...	110
Washington	8	20
do. pref	100	...
Williamson	...	125
Wiscasset	110	...
Woodlawn	75	92
Pelzer Mfg. Co., S. C.	...	135
Parker Cotton Mills Co. preferred	60	65
Parker C. M. Co., com.	...	20
Parker Cotton Mills Co., guaranteed	100	100&int
Pickens Cotton Mills	100	...
Piedmont Mfg. Co., S. C.	144	160
Poe, F. W. Mfg. Co., S. C.	...	105 115
Riverside Mills, S. C.	...	25
Saxon Mills, S. C.	...	120
Sibley Mfg. Co., Ga.	62	64
Spartan Mills, S. C.	...	110
Toxaway Mills, S. C.	...	72
Tucapau Mills, S. C.	...	260
Union-Buffalo Mill, S. C.
Union-Buffalo M., S. C. 1st preferred	50	55
Union-Buffalo M., S. C. 1st preferred	...	45
Ware Shoals	...	80
Warren Mfg. Co., S. C.	80	85
Warren Mfg. Co., pfd.	100	...
Watts Mills, S. C.	...	70
C.	...	80
Whitney Mfg. Co., S. C.	...	97
Williamston Mills	...	115
Woodruff Cot. Mills	95	...

Personal Items

E. W. Putnam has returned to his former position as loom fixer at High Shoals, N. C.

Harrison Williams of High Shoals, N. C., is now fixing looms at Shelby N. C.

W. E. Owens, of Clearwater, S. C., is now fixing looms at Bath, S. C.

N. B. Hill has been promoted to inside superintendent of the Caswell Cotton Mills, Kinston, N. C.

J. A. Byrd is now overseer of spinning at the Caswell Cotton Mills, Kinston, N. C.

Amos Banister, of Ware Shoals, S. C., has accepted a position with the Cowpens (S. C.) Mills.

Mike Elliott has not resigned as overseer of carding at the Gainesville (Ga.) Cotton Mills as stated through error last week.

J. A. Rhodes of the Central Mills, Sylacauga, Ala., has accepted the position of overseer of carding at the Coosa Spinning Mills, Bon Air Ala.

Sam Stokes has resigned as overseer of carding at the Kinston (N. C.) Cotton Mills to become night superintendent of the Caswell Cotton Mills of the same place.

Clarence Dellinger has resigned his position with the Hanes Spinning Mill, Winston-Salem, N. C., to become second hand in carding at the Hopedale Mills, Burlington, N. C.

T. E. Ratcliffe has resigned the position of overseer of spinning at the Roanoke Mills, Roanoke Rapids, N. C., which he has held for eight years and accepted a similar position with the Durham Hosiery Mills No. 4, Chapel Hill, N. C.

John L. Robinson has resigned his position with the Fulton Bag & Cotton Mills, Atlanta, Ga., to become superintendent of the Buffalo Mills, of the Locke Cotton Mills, Concord, N. C. His operatives at Atlanta presented him with a Waterman fountain pen and a Stetson hat as a token of their esteem.

Charged With Criminal Assault.

Crawford Gray, a young man employed in a mill is in jail at La-Grange, Ga., charged with criminal assault.

Sunday morning at 2 o'clock, it is alleged, that he entered the home of a young woman, a widow, and criminally assaulted her, despite her screams and heroic struggle, he overpowered her, it is said, and strangled her into submission.

Union Shuttle Co. Changes.

David Brown, president of the Union Shuttle Co. and the Weld Bobbin & Spool Co., of Lawrence Mass., has announced that he has purchased the interest of John A. Abercrombie in both companies and

Loom Fixers Entertained.

The loom fixers at the Merrimack Mills, Huntsville, Ala., were recently tendered a delightful oyster supper by J. H. Bagwell, overseer of weaving at those mills. Mr. Bagwell, wishing to show his appreciation of the hearty co-operation given him by his assistants, chose this way of expressing his recognition of their services, and proved a delightful host.

Those present were: Jas. J. Bradley, agent; H. E. Bates, superintendent; W. A. Esslinger, time-keeper; J. M. Lamberth, assistant in slashing; K. W. Ware, C. E. Cole, C. H. Lockman, assistants in weaving. Loom fixers, C. P. Smith, Walter Powell, Elgin Bledsoe, Ben Boswell, M. A. Phelps. Will Roberts Clarence Baker, P. D. Martin, J. S. Friddle, Jas. Marks, A. P. McAbee, E. Brazier, L. W. O'Quinn, O. T. Smith, Jno. Neal, Herman Neal, J. A. Briggs, Tom Cook, Z. M. Rutledge, T. L. Wilkerson, Arthur Baucom, W. A. Venable, E. L. Baucom. After supper all present went to the Lyric Theater and every one present spent a very pleasant evening.

that Mr. Abercrombie will sever his connection with both.

David Brown now has the entire management of the two companies the high grade products of which are well known in the South.

100 Pints Booze Seized.

Constable H. S. Deaver of the Brandon Mill, Greenville, S. C., seized two barrels of whiskey and turned them over to the sheriff. The booze was concealed in a hen house on the premises of Mrs. D. M. Sheppard. Each of the barrels contained 50 pints of "Wedding Belle" rye.

Among Those Present.

(Continued from Page 6)

James H. Maxwell, Sou. Rep. Keever Starch Co., Greenville, S. C.
H. P. Meikleham, Agt. "Mass. Mills in Ga.," Lindale, Ga.
H. C. Mims, Sou. Agt. Holyoke Belt-ing Co., Greenville, S. C.
W. B. Merritt, Richmond Spin. Co. East Lake, Tenn.
W. S. Morton, Supt. Dallas C. Mill Dallas, Texas.
T. M. McEntire, Supt. Loray Mill Gastonia, N. C.
A. H. McKenzie, Dyer, Peerless Woolen Mills, Rossville, Ga.
W. S. Norris, Spinner, Monroe (Ga.)

Cotton Mill.
Frank G. North, Rep. Barber-Colman Co., Atlanta, Ga.
J. D. Patton, Spinner, Walton Mill Monroe, Ga.
W. D. Pike, Spinner, Mandeville Mill, Carrollton, Ga.
J. F. Porter, Salesman, Am. Moistening Co., Atlanta, Ga.
J. H. Quinlan, Supt. C. C. & Ex. Co. Cedartown, Ga.
B. C. Roberts, Supt., Columbia, Tenn.
S. A. Scott, Supt., Acworth, Ga.
G. G. Simpson, Editor Textile Mfr. Charlotte, N. C.
H. Seydel, Mgr. Seydel Mfg. Co., Jersey City, N. J.
H. H. Sessions, Overseer Winding, etc., Richmond Spin. Co., East Lake, Tenn.
P. A. Smith, Spinner, Fulton Bag & Cotton Mill, Atlanta, Ga.
S. C. Thomas, Salesman, Seydel Mfg Co., Spartanburg, S. C.
R. D. Thomas, Sou. Rep. Joseph Sykes Co., Charlotte, N. C.
W. R. Thomason, Supt. Palmetto (Ga.) Cotton Mill.
C. P. Thompson, Supt. Trion (Ga.) Cotton Mill.
J. A. Thompson, Carder, Union Mill LaFayette, Ga.
D. E. Trask, Carder, Richmond Spin. Co., East Lake, Tenn.
P. J. Voss, Rep. Tex. Oil Co., Atlanta, Ga.
T. B. Wallace, Supt. Dunear Mill Greenville, S. C.
Ralph Webber, Spinner, Mass. Mills in Ga., Lindale, Ga.
R. H. Westbrook, Sou. Rep. Buckeye Elec. Works of Cleveland, O. Charlotte, N. C.
R. A. Whatley, Supt. LaFayette (Ga.) Cotton Mills.
R. S. Williamson, Supt. Keever Starch Co., Columbus, Ohio.
Geo. Witherspoon, Salesman, Seydel Co., Jersey City, N. J.
W. S. Wright, Carder, Summerville, Ga.
H. F. Wynn, Carder, Mandeville Mill, Carrollton, Ga.

Flint Mfg. Co.

Gastonia, N. C.

J. R. Withers.....Supt
G. R. Hooper.....Carder
W. C. Withers.....Spinner
J. P. Ladd.....Master Mechanic

Gate City Mill.

College Park, Ga.

J. W. Jolly.....Supt
G. R. Brook.....Carder
A. R. Drake.....Spinner
W. T. Nagan.....Winder
A. Jarners.....Master Mechanic

Beaumont Mills.

Spartanburg, S. C.

W. A. Black.....Supt
A. L. Fisher.....Carder
W. M. Suttle.....Spinner
W. T. Garner.....Weaver
Chas. Gossett.....Cloth Room
A. P. Stevens.....Master Mechanic

Sawyer—Has your wife left you bed and board? Naby—Yes, that's about all she has left me.—Judge.

SHAMBO SHUTTLE COMPANY

WOONSOCKET, R. I.

PATENT HAND THREADING SHUTTLES

T. M. COSTELLO

A. M. GUILLET

Dixie Spindle & Flyer Co., Inc.

REAR 11 E. 4th STREET, CHARLOTTE, N. C.
EXPERT OVERHAULERS AND REPAIRERS OF

SPINNING AND CARD-ROOM MACHINERY

REPAIRS

Spindles Straightened and Re-pointed
Steel Rolls Re Necked and Re-Fluted
Card Room Spindles Re-Topped
Flyers Repaired and Balanced

MANUFACTURE AND FURNISH

Steel Rolls, Pressers, Spindles
Flyers, Bolsters, Bases
Top Rolls, Collars
Whorls, Steps, Etc

OUR EXPERTS ENDORSED BY OVER 500 MILL MEN

SOLUBLE SIZING TALLOW



THIS PREPARATION is simply raw beef tallow made soluble. In view of the fact that raw tallow will not dissolve and hence does not combine with starches, we herein offer an article that avoids these objectionable features. Soluble Sizing Tallow dissolves and combines readily with all starches and acts as a most valuable softening agent. Users of this article will avoid the danger of mildewed warps and also the disagreeable odor of Raw Tallow in the goods. In short, an excellent softening agent.

ARABOL MANUFACTURING CO.

100 William Street, New York

CAMERON MacRAE Southern Sales Agent CHARLOTTE, N. C.

Want Department

Want Advertisements.

If you are needing men for any position or have second hand machinery, etc., to sell, the want columns of the *Southern Textile Bulletin* afford a good medium for advertising the fact.

Advertisements placed with us reach all the mills.

Employment Bureau.

The Employment Bureau is a feature of the *Southern Textile Bulletin* and we have better facilities for placing men in Southern mills than any other journal.

The cost of joining our employment bureau is only \$1.00 and there is no other cost unless a position is secured, in which case a reasonable fee is charged.

We do not guarantee to place every man who joins our employment bureau, but we do give them the best service of any employment bureau connected with the Southern textile industry.

Weavers Wanted.

Wanted at once, weavers on Crompton & Knowles looms. Good weavers make from \$9.00 \$14.00 per week. Can also use doffers, spinners, spoolers and card room help. Griffin Mfg. Co., Griffin, Ga.

Machinery For Sale.

10,000 McMullen Spindles.
10,000 Rhodes-Chandler Separators.
Can be purchased at the right price. Address Box 1679, Atlanta, Ga.

Machinist Wanted.

Want first-class machinist to overhaul spinning. Also first-class section man for spinning. Address B. L. Ledwell, Knoxville Spinning Co., Knoxville, Tenn.

Weavers Wanted.

We are starting up all our machinery and can use at once good weavers on gingham, flannels, madras, etc. Can also use some loom fixers and card and spinning room help.

Hope Mills Mfg. Co.,
Hope Mills, N. C.

Loom Fixers Wanted.

Loom fixers make from \$1.75 to \$1.90 per day on new Draper looms at the Hampton Cotton Mills, Chester, S. C. Good running job. If interested write to L. O. Bunton, Overseer of Weaving.

Drawing-in Operator Wanted.

Wanted at once: Drawing-in machine man on American warp drawing-in machine. Kansas City Cotton Mills Co., Kansas City, Kansas.

Wanted

Experienced Operator for American Warp-drawing Machine, \$2.00 per day for one that can keep Warps for 400 looms on Warps averaging 1,550 ends. Address No. 1019.

WANT position as superintendent of small yarn mill or carder and spinner in large mill. Now employed but want larger job. Can give present employers as reference. Address No. 238.

WANT position as overseer carding in N. C., S. C., Ga., or Va. Can come on short notice. Long experience and good manager of help. Can run any size room. Now employed, but want to change. Good references. No. 239.

WANT position as superintendent. Experienced on both coarse and fine numbers and am expert on combed work. Good references from present and all former employers. Address No. 240.

WANT position as superintendent of hosiery or weaving mill. Married. Strictly temperate. Age 40 25 years experience. 17 years as overseer and superintendent. Now employed. Best of references. Address No. 241.

C.

WANT position as overseer of spinning. Eight years' experience. Age 25. Strictly sober; good manager of help and can furnish best of references. Address No. 242.

WANT position as superintendent. Now employed and giving satisfaction but prefer to change. Have good reputation for ability and can get results. Address No. 243.

WANT position as overseer of weaving. 8 years as overseer in present position on fancy gingham, dress goods and dobby weaves. Now employed. Good references. Address No. 244.

WANT position as superintendent. Have had long experience and can get results. Now employed. Would like to correspond with mill needing first class man. Address No. 245.

WANT position as superintendent of small mill or carder and spinner in large mill. Have had long experience and can furnish satisfactory references. Address No. 246.

WANT position as overseer of carding. Am an experienced carder. Well educated and experienced in other departments. Good references. Address No. 247.

WANT position as overseer of carding, or carder and spinner or superintendent of small mill. At present employed as carder in large mill and am giving satisfaction. Good references. Address No. 248.

WANT position as superintendent of yarn mill or carder and spinner. 20 years' experience as overseer and superintendent. Good references. Address No. 249.

WANT position as manager or superintendent. Have had long experience and can get results. Now employed. Good references. Address No. 250.

WANT position as overseer of spinning. Married and sober. Good manager of help. Can change on short notice. Address No. 251.

WANT position as overseer of spinning at not less than \$3.00 per day. Now employed and can furnish best of references. Address No. 252.

WANT position as overseer of weaving. Have had 18 years' experience as overseer of weaving, slashing and cloth room. Good manager of help. Good references. Address No. 253.

WANT position as overseer of carding or spinning. 16 years' experience in both carding and spinning from 8's to 60's. Age 46. Married. Sober. Good manager of help. Good references. Address No. 254.

WANT position as overseer of carding and spinning. Am strong man in carding and spinning. Also have experience in weaving. Now employed and giving satisfaction but wish to change. Address No. 255.

WANT position as overseer of spinning or carder and spinner in small mill. Strictly sober. Good manager of help. Now employed but wish to change. Married. Age 33. Eight years as overseer. Address No. 256.

WANT position as overseer of carding in large mill or superintendent of small mill. Have had long experience and can furnish best of references. Address No. 257.

WANT position as overseer of spinning or overseer of weaving in large colored goods mill. Competent and experienced in both rooms and also could give satisfaction as superintendent. Good references. Address No. 258.

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WANT position as overseer of carding or spinning or both. Have had long experience and am now employed. Can furnish best of references. Address No. 260.

WANT position as overseer of carding. Married. 28 years old. Strictly sober. Good manager of help. 15 years experience in card room. Now employed. Good references. No. 261.

WANT position as overseer of spinning. Now employed. 7 years experience as overseer on 12's to 60's. Familiar with spooling, warping, etc. Satisfactory references. Address No. 262.

WANT position as overseer of weaving. Long experience as second hand. 2 years as overseer and have given satisfaction. Can furnish good references both as to ability and character. Address No. 263.

WANT position as overseer of weaving. Married. Age 36. 12 years' experience in mill. 4 years as overseer and second hand. Sober and good manager of help. I look after both quality and quantity. Now employed. Good references. Address No. 264.

WANT position as overseer of spinning. 20 years' experience on both colored and white work. Age 41. Married. Can furnish best of references. Address No. 265.

WANT—Position as superintendent in small mill or carder in large mill. Now employed as superintendent but am open for an engagement at not less than \$100.00 per month. Prefer mill on hosiery yarns. Have had long experience as overseer. Married. 37 years old, and can give good references. No. 266.

WANT position as superintendent of yarn mill. Eight years' experience as superintendent and am now employed but prefer to change. Can keep books and would accept position as manager. Good references. Address No. 267.

(Continued on next page)

WANT position as second hand in card room. Now employed and can furnish good references but wish to change. Can give satisfaction. Address No. 268.

A NO. I overseer of weaving now employed wants to correspond with mill interested in securing a man that is sober, energetic and competent. Will supply references. No. 269.

WANT position as overseer of carding. Now employed but have good reason for change. 9 years' experience. Familiar with both white and colored work. Married. Good references. No. 270.

WANT position as overseer of spinning at not less than \$3.00 per day. Have been overseer 14 years, 11 years in one room. Now employed but can change on two weeks' notice. No. 271.

WANT position as overseer spinning in large room. 20 years' experience. Have been in charge of large room for 5 years. Now overseer of 50,000-spindle room. Reason for changing do not like location. Age 30. Married. Best of references. Can change on two weeks' notice. No. 272.

WANT position as overseer weaving, plain or fancies. Can do own designing and know plain Draper or box looms. Long experience and best of reference. Age 37. Married. Now employed as designer and overseer of weaving in a S. C. mill with over 1,600 looms on plains and fancies. Can change on short notice. No. 273.

WANT position as overseer of cloth room. Now employed and have had long experience. Can furnish satisfactory references. Address No. 274.

WANT position as overseer of finishing. Have had long experience on a wide range of goods and am an expert on starches and gums. Good references. Address No. 275.

WANT position as superintendent of medium size mill or carder and spinner in large mill. Am now employed as carder and spinner in 10,000-spindle mill, but would accept better position. Practical experience, and have taken Scranton, Pa., textile course. Address No. 276.

WANT position as superintendent of small mill or overseer of weaving in large mill. Now employed but prefer to change about first of year. Ten years' experience as overseer. Can furnish best of references. Address No. 277.

WANT position as overseer of spinning at not less than \$2.75 per day. Have had long experience and now employed. Good reference. Address No. 278.

WANT position as overseer of card room. Prefer a North or South Carolina mill. Now employed but

can furnish good references. Address No. 279.

WANT position as carder and spinner or superintendent of yarn mill. Will not accept less than perience and can furnish best of references. Address No. 280.

WANT position as overseer spinning, married, strictly sober. Practical as well as technical man. 14 years experience in carding and spinning. Now employed in room of 32,000 spindles could change on short notice. No. 281.

WANT position as superintendent. Now employed but wish to change. Have had good experience on both white and colored goods and can furnish satisfactory references. Address No. 282.

WANT position as superintendent of sheet and pillow-case factory or assistant superintendent of bleaching of both. Can furnish good references No. 284.

Want position as superintendent or superintendent and manager of either yarn or plain cloth mill. Now running a hosiery yarn mill. Competent and reliable. Can invest some capital in good proposition. Address No. 285.

WANT position as carder and spinner on night or day run. Have filled present position as carder and spinner for five years. Can furnish good references and get quality and quantity. Address No. 286.

WANT position as superintendent or overseer of spinning in large mill. Experience on both long and short staples and yarns from 2's to 100's. Now employed. Good references. Address No. 287.

WANT position as superintendent, experienced in both weave and yarn mills. Have held present position as superintendent for five years. Middle age man, strictly sober and know how to get results. Would like take stock in new mill. Present employers as reference. Address No. 288.

WANT position as overseer of carding or overseer of spinning or carder and spinner, 14 years' experience as overseer. Can furnish best of references. Address No. 289.

WANT position as superintendent in spinning or weave mill. Have had long experience as overseer of carding and spinning. Seven years as superintendent. Five years with present mill as superintendent. Do not drink and can give good references. Can change on 30 days' notice. Will only change for better salary. Address No. 290.

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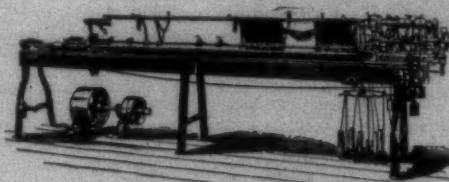
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Larger salary only reason for changing. Now carder and assistant superintendent. Six years with same mill. Can give good references. Address No. 291.

WANT position as cloth room overseer. Now employed, but can change on short notice. Experienced on white goods. Can do my own fixing when necessary. Best of references. Prefer position in N. C. or S. C., at not less than \$2.00 per day. Address No. 292.

WANT position as overseer weaving at not less than \$3.00 per day. Good references as to ability and character. Now employed as second hand on 11 E. Momedl Draper looms. Address No. 291.

WANT position as overseer weaving. Experienced on both white and colored work, checks and dobby. Have been overseer for 8 years. Married. Good references. Address No. 290.

THE RELATION OF WELFARE WORK TO EFFICIENCY.

(Continued from Page 9)

life. Well selected moving picture entertainments, illustrated talks on various subjects, home talent entertainments, informal socials for various groups such as lodges, military companies, young people's organizations, gymnasium classes, a night school group, and the general public is promoted by the various cotton mill young men's Christian associations with good results.

The machinery in the mill has been used as a simile up to this point. For efficiency the machinery must be strongly built; so must the human body that controls the machinery. Machinery must be built so that it will perform its part adequately; so with the human body which must be educated and trained to do properly the work required of it. Machinery must be cared for and cleaned—recreated; so with the employees of an industry. Wholesome social life is necessary to neutralize monotony and its malignant results. With these requirements the efficiency of machinery is about complete. Not so with man. He needs something more. Unless efficiency is built on a character foundation it is liable to fall with any of the many industrial storms that prevail. Character is the foundation of efficiency and religion is the Gibraltar of character. Therefore an adequate welfare program must include the development of the religious life of individuals. The Young Men's Christian Association is earnestly promoting men and boy's Sunday meetings, Bible classes and training classes. The secretaries are meeting men and boys face to face in personal council. These efforts are producing results.

The human man has accomplished wonderful things in the past. The future demands even greater things. Efficiency is the key. To be efficient man must be built four square, physically, mentally, socially, spiritually. This is welfare work.

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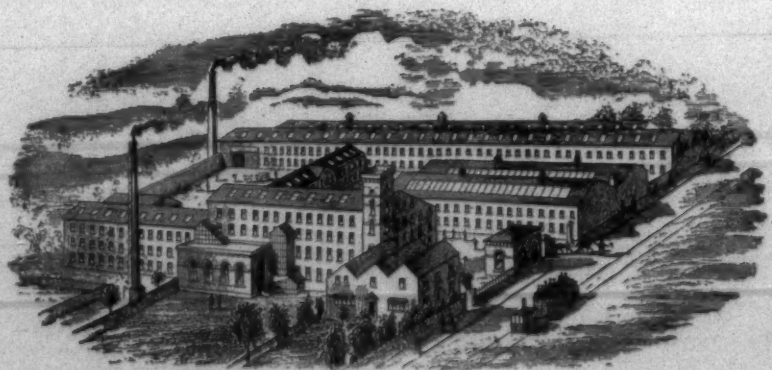
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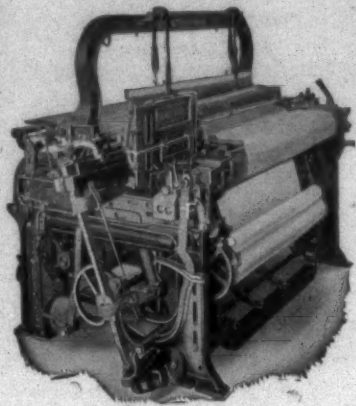
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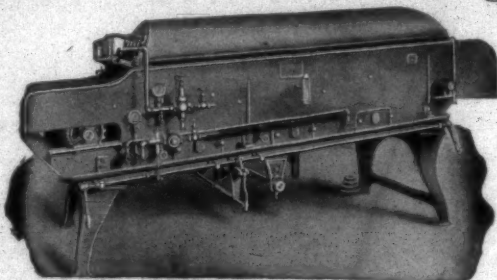
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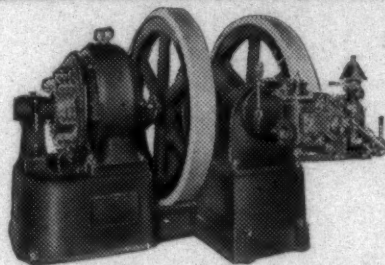
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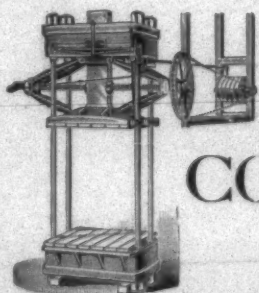
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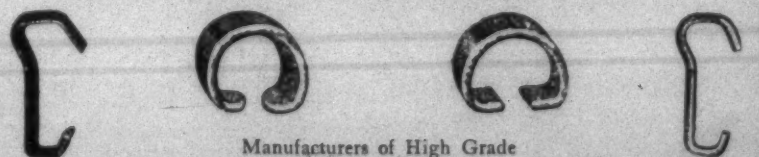
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